ia BPG

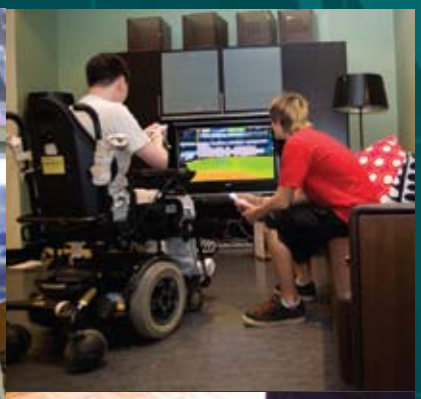
INTERNATIONAL
AFFAIRS & BEST PRACTICE
GUIDELINES

TRANSFORMING
NURSING THROUGH
KNOWLEDGE

Clinical Best
Practice Guidelines

FEBRUARY 2012

Promoting Safety: Alternative Approaches to the Use of Restraints



RNAO
Registered Nurses' Association of Ontario
L'Association des infirmières et infirmiers
autorisés de l'Ontario

Disclaimer

These guidelines are not binding on nurses or the organizations that employ them. The use of these guidelines should be flexible, and based on individual needs and local circumstances. They neither constitute a liability nor discharge from liability. While every effort has been made to ensure the accuracy of the contents at the time of publication, neither the authors nor the Registered Nurses' Association of Ontario give any guarantee as to the accuracy of the information contained in them nor accept any liability, with respect to loss, damage, injury or expense arising from any such errors or omissions in the contents of this work.

Copyright

With the exception of those portions of this document for which a specific prohibition or limitation against copying appears, the balance of this document may be produced, reproduced and published in its entirety, without modification, in any form, including in electronic form, for educational or non-commercial purposes. Should any adaptation of the material be required for any reason, written permission must be obtained from the Registered Nurses' Association of Ontario. Appropriate credit or citation must appear on all copied materials as follows:

> Registered Nurses' Association of Ontario. (2012). *Promoting Safety: Alternative Approaches to the Use of Restraints*. Toronto, ON: Registered Nurses' Association of Ontario.

This Program is funded by the Ontario Ministry of Health and Long-Term Care.

Contact Information

Registered Nurses' Association of Ontario
158 Pearl Street, Toronto, Ontario M5H 1L3
Website: www.rnao.org/bestpractices

Greetings from Doris Grinspun,

Executive Director Registered Nurses' Association of Ontario

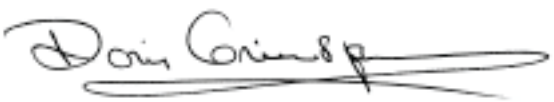
It is with great excitement that the Registered Nurses' Association of Ontario (RNAO) presents this guideline, *Promoting Safety: Alternative Approaches to the Use of Restraints*, to the health-care community. Evidence-based practice supports the excellence in service that nurses are committed to delivering in our day-to-day practice. The RNAO is delighted to provide this key resource to you.

The RNAO offers its heartfelt thanks to the many individuals and institutions who are making our vision for Nursing Best Practice Guidelines (BPGs) a reality: the government of Ontario for recognizing our ability to lead the program, and providing multi-year funding; Irmajean Bajnok, Director, RNAO International Affairs and Best Practice Guidelines (IABPG) Program, for her expertise and leadership in advancing the production of the BPGs; each and every Team Leader involved, and for this BPG in particular – Laura Wagner and Athina Perivolaris – for their superb stewardship, commitment and expertise. Also thanks to Brenda Dusek, RNAO's IABPG Program Manager, for her intense work to see that this BPG moved from concept to reality. Special thanks to the BPG Panel – we respect and value your expertise and volunteer work. To all, we could not have done this without you!

The nursing community, with its commitment to and passion for excellence in nursing care, has provided the knowledge and countless hours essential to the development, implementation, evaluation and revision of each guideline. Employers have responded enthusiastically by nominating best practice champions, implementing and evaluating the guidelines and working towards a culture of evidence-based practice.

Successful uptake of these guidelines requires a concerted effort from nurse clinicians and their health-care colleagues from other disciplines, and from nurse educators in academic and practice settings and from employers. After lodging these guidelines into their minds and hearts, knowledgeable and skillful nurses and nursing students need healthy and supportive work environments to help bring these guidelines to practice actions.

We ask that you share this guideline with members of your interprofessional team, as there is much to learn from one another. Together, we can ensure that the public receives the best possible care each and every time they come in contact with us. Let's make them the real winners in this important effort!



Doris Grinspun, RN, MSN, PhD, LLD(Hon), O.ONT.
Executive Director
Registered Nurses' Association of Ontario

Table of Contents

BACKGROUND

How to use this Document....4
Summary of Recommendations....5-7
Interpretation of Evidence....8
Development Panel Members....9-10
Stakeholder Acknowledgements....11-16
Purpose and Scope....17
Responsibility for Development....18
Background Context....19-21

RECOMMENDATIONS

Practice Recommendations....22-43
Education Recommendations....44-45
Organization and Policy Recommendations....46-50
Research Gaps and Future Implications....51
Evaluation/Monitoring of Guideline....52-55
Implementation Strategies....56
Process for Updating and Reviewing Guideline....57

REFERENCES

References List....58-67
Bibliography....68-82

APPENDICES

Appendix A: Glossary of Terms....83-87
Appendix B: Guideline Development Process....88
Appendix C: Process for Systematic Review....89-92

Appendix D: Description of the Toolkit 93

Appendix E: Example: Experience of Being Restrained (SEBR) Interview Tool 94-96

Appendix F: Example: Short-Term Assessment of Risk and Treatability Tool (START) 97-98

Appendix G: Example: Broset Violence Checklist Tool 99-100

Appendix H: Example: Historical-Clinical-Risk Management: 20 (HCR-20) 101

Appendix I: Example: Coping Agreement Questionnaire (CAQ) 102-103

Appendix J: Example: Alternative Approaches List 104-107

Appendix K: Example: Caregivers Perceptions of Restraint Use Questionnaire (PRUQ) 108-112

Appendix L: Example: ABC (Antecedent-Behavior-Consequence) Charting Template 113

Appendix M: Example: Behaviour Monitoring Log 114-115

Appendix N: Example: Alternative to Restraints Decision Tree 116

Appendix O: Example: Mutual Action Plan Behaviour Profile 117-118

Appendix P: Example: Safety Plan Interventions 119-120

Appendix Q: Example: Siderail and Alternative Equipment Intervention Decision Tree 121

Appendix R: Example: Personal De-escalation Plan 122-123

Appendix S: Example: Safety Plan Women's Program 124

Appendix T: Example: Comfort Plan Mental Health and Addiction Program 125

Appendix U: Example: De-escalation Tips and Interventions to Assist Patients Cope 126-127

Appendix V: Resource List of Websites 128-130

Appendix W : Example: Observation & Documentation Record: 12-Hour Emergency Use of Chemical Restraint, Seclusion & Mechanical Restraint Record 131-138

Appendix X: Example: Debriefing Form: Patient Debriefing Tool following Restraint/Seclusion 139

Appendix Y: Example: Organization Audit Form: Least Restraint Last Resort (LRLR) Program: Unit-based Data Collection Form for the Least Restraint Last Resort (LRLR) Program Adherence 140-144

APPENDICES

How To Use this Document

This nursing best practice guideline is a comprehensive document, which provides resources necessary for the support of evidence-based nursing practice. The document must be reviewed and applied, based on the specific needs of the organization or practice setting/environment, as well as the needs and wishes of the client. This guideline should not be applied in a "cookbook" fashion, but rather as a tool to enhance decision-making in the provision of individualized care. In addition, the guideline provides an overview of appropriate structures and supports necessary for the provision of best possible care.

Nurses, other health-care professionals and administrators who lead and facilitate practice changes will find this document invaluable for the development of policies, procedures, protocols, educational programs, and assessment and documentation tools. It is recommended that this nursing best practice guideline be used as a resource tool. Nurses providing direct care will benefit from reviewing the recommendations, the evidence in support of the recommendations and the process that was used to develop the guidelines. However, it is highly recommended that practice settings/environments adapt these guidelines in formats that would be user-friendly for daily use. This guideline has some suggested formats for local adaptation and tailoring.

Organizations wishing to use the guideline may do so in a number of ways:

a) Assess current nursing and health-care practices using the recommendations in the guideline.
b) Identify recommendations that will address identified needs or gaps in services.
c) Develop a plan to implement the recommendations systematically, using associated tools and resources.

The Registered Nurses' Association of Ontario is interested in hearing how you have implemented this guideline. Please contact us to share your story. Implementation resources will be made available at our website (www.rnao.org) to assist individuals and organizations in implementing best practice guidelines.

Summary of Recommendations

Practice Recommendations

	RECOMMENDATION	Level of Evidence
1	Nurses establish a therapeutic relationship with the client who is at risk of harm to self/ others to help prevent the use of restraints.	IV
2	Nurses should assess the client on admission and on an ongoing basis to identify any risk factors that may result in the use of restraints.	IIb
3	Nurses should utilize clinical judgment and validated assessment tools to assess clients at risk for restraint use.	IIb
4	Nurses in partnership with the interprofessional team and client/family/substitute decision-makers (SDM) should create an individualized plan of care that focuses on alternative approaches to the use of restraints.	IIb
5	Nurses in partnership with the interprofessional team should continuously monitor and re-evaluate the client's plan of care based on observation and/or concerns expressed by the client and/or family/SDM.	IV
6	Nurses in partnership with the interprofessional team should implement multi-component strategies to prevent the use of restraints for clients identified at risk.	IIa
7	Nurses in partnership with the interprofessional team should implement de-escalation and crisis management techniques and mobilize the appropriate resources to promote safety and mitigate risk of harm for all in the presence of escalating responsive behaviours.	IIb
8	Nurses in partnership with the interprofessional team should engage in care practices that minimize any risk to the client's safety and well-being throughout the duration of any restraining process.	IV

Education Recommendations

	RECOMMENDATION	Level of Evidence
9	Education on working with clients at risk for the use of restraints should be included in all entry to practice nursing curricula as well as ongoing professional development opportunities with specific emphasis on: ▪ Approaches to care: (e.g. trauma informed care); ▪ Communication and education of client/family/SDM and key components of debriefing; ▪ Education on nursing responsibilities for the proper application of restraints; ▪ Ethical decision-making; ▪ Knowledge of diagnoses and common triggers associated with responsive behaviours putting clients at risk for the use of restraints; ▪ Interprofessional collaboration; ▪ Knowledge of basic prevention, alternative approaches, de-escalation and crisis management; ▪ Monitoring and documentation responsibilities; ▪ Nurses' responsibilities regarding self-reflection and exploring their values and beliefs surrounding the use of restraints and threats to client autonomy and human rights; ▪ Therapeutic nurse client relationships; client-centred care and client rights; ▪ Types of restraints (least to most restrictive) and associated safety risks, and the potential complications from the use of restraints; and ▪ Understanding of the legal and legislative requirements governing the use of restraints.	Ib

Organization & Policy Recommendations

	RECOMMENDATION	Level of Evidence
10	Health-care organizations should implement risk management and quality improvement strategies to enable a culture that promotes alternative approaches to the use of restraints in support of client rights and staff safety by: ▪ Establishing a definition of what is a restraint; ▪ Developing a philosophy that promotes alternative approaches to the use of restraints; ▪ Establishing a restraint reduction/prevention policy; ▪ Developing structures that allow for early identification of clients at risk of harm to self/others placing them at risk for the use of restraints; ▪ Educating the client/family/SDM about the associated risks of restraint use and exploring their concepts of safety; ▪ Establishing a multi-component program including staff education on alternative strategies to the use of restraints; ▪ Using alternative approaches, de-escalation and crisis management as the first and second line intervention strategies prior to the use of restraints as a safety measure of last resort; ▪ Establishing monitoring protocols for clients and the documentation requirements for the duration of any restraining episode; ▪ Establishing communication responsibilities and debriefing procedures for client/family/SDM and the interprofessional team; and ▪ Establishing evaluation programs to monitor the rate of restraint use, the uptake of alternative approaches to the use of restraints, and the impact on client/family/SDM and interprofessional team safety.	Ib
11	The organization's model of care should promote an interprofessional team approach in collaboration with the client/family/SDM that supports the use of alternative approaches and prevents the use of restraints.	III
12	Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as appropriate facilitation. Organizations may wish to develop a plan for implementation that includes: ▪ An assessment of organizational readiness and barriers to education, taking into account local circumstances. ▪ Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process. ▪ Ongoing opportunities for discussion and education to reinforce the importance of best practices. ▪ Dedication of a qualified individual to provide the support needed for the education and implementation process. ▪ Ongoing opportunities for discussion and education to reinforce the importance of best practices. ▪ Opportunities for reflection on personal and organizational experience in implementing guidelines.	IV

Interpretation of Evidence

Types of Evidence

	Levels of Evidence
Ia	Evidence obtained from systematic review and meta-analysis of randomized controlled trials.
Ib	Evidence obtained from at least one well-designed randomized controlled trial.
IIa	Evidence obtained from at least one well-designed controlled study without randomization.
IIb	Evidence obtained from at least one other type of well-designed quasi-experimental study, without randomization.
III	Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies and case studies.
IV	Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities.

Source: SIGN 50. Levels of Evidence. Available at: http://www.sign.ac.uk/guidelines/fulltext/50/annexb.html

Development Panel Members

Laura M. Wagner RN, PhD
Team Leader
Adjunct Scientist
Kunin Lunenfeld Applied & Evaluative Research Unit
Baycrest Geriatric Health Care System
Toronto, Ontario
Assistant Professor
New York University College of Nursing
Hartford Institute for Geriatric Nursing
New York, NY, USA

Athina Perivolaris RN, BScN, MN
Team Leader
Advanced Practice Nurse
Mental Health/Gerontology, Centre for Addiction and Mental Health
Toronto, Ontario

Nancy Boaro RN, BScN, MN, CNN(C), CRN(C)
Advanced Practice Leader, Neuro Program
Toronto Rehabilitation Institute
Toronto, Ontario

Lisa Casselman BSc, BSW, MSW, RSW
Mental Health Commission of Canada (July 2011)
Lisa Casselman and Associates
Calgary, Alberta

Louise Carreau RN, BScN, MN, GNC(C)
Advanced Practice Nurse
Bruyère Continuing Care
Ottawa, Ontario

Susan Edgar RN, BScN, MN, GNC(C)
Clinical Nurse Specialist, Geriatrics
Grand River Hospital,
Kitchener/Waterloo, Ontario

Jeanette Kuntz RN, BScN
Corporate Nursing Consultant Nursing/Retirement Homes
Caressant Care Nursing Homes (Corporate)
Woodstock, Ontario

Mary Anne Lamothe RN, MScN
Coordinator Clinical Practice & Standards
North Bay Regional Health Centre
North Bay, Ontario

Ibo Barbacsy-MacDonald RN, BHK, BScN, MSc
Long-Term Care Best Practice Coordinator
South East, Local Health Integration Network
Registered Nurses' Association of Ontario
South Eastern Ontario

Mary-Lou Martin RN, BScN, MScN, MEd
Clinical Nurse Specialist, St Joseph's Healthcare
Associate Professor, McMaster University
Hamilton, Ontario

Catherine Morash RN, BScN, MEd
Advanced Practice Nurse, Trauma, Emergency & Critical Care
Sunnybrook Health Sciences Centre
Toronto, Ontario

Michelle A. Peralta RN, BScN, BHSc, MN
Clinical Nurse Specialist, Medical Psychiatry Program
Department of Psychiatry
Hospital for Sick Children
Toronto, Ontario

Paula Raggiunti RN, BScN, MHSc, CHE
Director, Infection Prevention & Control
Rouge Valley Health System
Scarborough, Ontario

Dianne Rossy RN, BN, MScN, GNC(C)
Advanced Practice Nurse, Geriatrics
The Ottawa Hospital
Ottawa, Ontario

Sanaz Riahi RN, BScN, MSN
Clinical Education Leader
Professional Practice
Ontario Shores Centre for Mental Health Sciences
Whitby, Ontario

Anne Stephens RN, BScN, MEd, GNC(C)
Clinical Nurse Specialist - Seniors Care
Toronto Central Community Care Access Centre
Toronto, Ontario

Molly Westland RN, BScN, MN
Academic Chair
School of Education Health and Wellness
Fleming College
Peterborough, Ontario

Brenda Dusek, RN, BN, MN
Facilitator, Program Manager
International Affairs and Best Practice Guidelines Program
Registered Nurses' Association of Ontario
Toronto, Ontario

Glynis Vales BA
Program Assistant
International Affairs and Best Practice Guidelines Program
Registered Nurses' Association of Ontario
Toronto, Ontario

The RNAO would like to acknowledge Mary Tang RN, BScN, MN, ENC(C), Lead Research Assistant, and Laura Sangster BA, M.CL.SC.(Candidate), Research Assistant for their contribution to the quality appraisal of the literature and the preparation of evidence tables.

Declarations of interest and confidentiality were made by all members of the guideline development panel. Further details are available from the Registered Nurses' Association of Ontario.

Stakeholder Acknowledgement

Stakeholders representing diverse perspectives were solicited for their feedback and the Registered Nurses' Association of Ontario would like to acknowledge the following for their contribution in reviewing this Nursing Best Practice Guideline:

Jamie Arthur BSc, BScPT	Client Services Manager Access Centre, Seniors Enhanced Care Program Toronto Central Community Care Toronto, Ontario
Susan Ashton RN, BScN, PHN	Principal Ashton Consulting Yellowknife, North West Territories
Susan Bailey RN, BA, MHScN	Long-Term Care Best Practice Guideline Coordinator Central, Local Health Integration Network Registered Nurses' Association Ontario Toronto, Ontario
Linda Bayly RN, BScN, GNC(C)	Corporate Nursing Consultant AON Inc. Omemee, Ontario
Shawna Belcher RN, BScN, CPMHN(C)	Team Leader Inpatient Mental Health Orillia Soldiers Memorial Hospital Orillia, Ontario
Jennifer Berger RN, BScN, MSc, CPMHN(C)	Clinical Specialist Canadian Institute for Health Information Ontario Mental Health Reporting System Toronto, Ontario
Susan Bernjak BA, RN, CACE, GNC(C)	Regional Educator Winnipeg Regional Health Authority Winnipeg, Manitoba
Joy Bevan RN, BHSc(Nurs), MHSM	Associate Vice President Medicine Grand River Hospital Kitchener, Ontario
Margaret Blastorah RN, PhD	Director of Nursing Knowledge Research & Innovation Sunnybrook Health Sciences Centre Toronto, Ontario
Jennifer Chambers BSc	Empowerment Coordinator Empowerment Council Centre for Addiction and Mental Health Toronto, Ontario

Uppala Chandrasekera MSW, RSW	Planning and Policy Analyst Canadian Mental Health Association Ontario Toronto, Ontario
Theresa Claxon-Wali, CPS	Chair Ontario Association of Patient Councils, Centre for Addiction and Mental Health Toronto, Ontario
Michelle Court, RN	Staff Nurse (Mental Health) St. Joseph's Hospital Mountain Site Hamilton, Ontario
Debora Cowie RPN	Grief and Bereavement Educator Ontario Shores Centre for Mental Health Sciences Whitby, Ontario
Yvonne Craig BScN, BN, RN, CPMHN(C)	Nurse Clinician Royal Ottawa Mental Health Centre Professional Development, Crisis Prevention Instructor Ottawa, Ontario
Kathy Culhane RN	Nurse Educator Lady Dunn Health Centre Wawa, Ontario
Michelle DaGloria RN, BScN	Clinical Educator, Professional Practice Lead Medicine Guelph General Hospital Guelph, Ontario
Sylvia Davidson MSc, DipGer, OT Reg.(Ont.)	Advanced Practice Leader – Geriatrics Toronto Rehabilitation Institute – University Centre Toronto, Ontario
Nicole Didyk MD, FRCP(C)	Geriatrician St. Mary's Hospital/Grand River Hospital Waterloo Regional Campus Michael G. De Groote School of Medicine McMaster University Waterloo, Ontario
Lynda Dunal MSc, BScOT, OT Reg.(Ont)	Occupational Therapist Baycrest Geriatric Health Care System Toronto, Ontario
Deborah Duncan RN	Vice President Regional Programs Waypoint Centre for Mental Health Care Penetanguishene, Ontario
Michele Durrant RN, MSc	Advanced Nursing Practice Educator The Hospital for Sick Children Toronto, Ontario

Patricia A. Ford RN(EC), BA(N), MHSc, GNC(C)	Clinical Nurse Specialist/Adult-Nurse Practitioner Geriatric Services Assistant Clinical Professor, McMaster University St. Joseph's Healthcare Hamilton, Ontario
Lisebeth Gatkowski RN, BScN, CPMHN(C)	Nurse Educator St. Joseph's Healthcare Hamilton Mental Health & Addiction Program Hamilton, Ontario
Ainsley Gillespie RN, MScN	Manager Nursing Practice Lakeview Manor Beaverton, Ontario
Bettyann Goertz RN, BScN, CPMHNC	Staff Nurse, Clinical Instructor London Health Sciences Centre Fanshawe College London, Ontario
Leslie Green RN	Extendicare, E.O. Long-Term Care Consultant, Extendicare Canada Corporate Office Markham, Ontario
Kathy-Lynn Greig RPN, BScN Student	Staff Nurse The Scarborough Hospital, Birchmount Campus, West Park Healthcare Centre Scarborough, Ontario
Carol Holmes RN, BScN, MN, GNC(C)	Long-Term Care Best Practice Guideline Coordinator Provincial Projects Registered Nurses' Association Ontario Toronto, Ontario
Laurie Horricks MN, RN	Clinical Nurse Specialist McMaster Children's Hospital Child and Youth Mental Health Unit Hamilton, Ontario
Hellen Jarman RN(EC), NP-PHC, BScN	Nurse Practitioner – Geriatrics St. Mary's General Hospital Waterloo, Ontario
Karen J. Kieley MHSA	Product Development Specialist Accreditation Canada Ottawa, Ontario
Stephanie Laivenieks RN, BScN	Senior Manager Clinical Programs The Hospital for Sick Children Toronto, Ontario

Frances Lankin	Commissioner Community and Social Services, Commission for the Review of Social Assistance in Ontario Toronto, Ontario
Sandra Law RN, MA	Geriatric Clinical Nurse Specialist, Geriatric Nurse Practitioner (U.S.) Toronto, Ontario
Arlette Lefebvre MD, FRCP(C)	Staff Psychiatrist Hospital for Sick Children Toronto, Ontario
Elena Luk RN, BScN, CNCC(C)	PhD Student Lawrence S. Bloomberg Faculty of Nursing University of Toronto Toronto, Ontario
Steve Lurie BA, MSW, MMGT	Executive Director The Canadian Mental Health Association, Toronto Branch Toronto, Ontario
Tina Mah BScOT, MBA	Vice President, Planning and Performance Management Grand River Hospital Kitchener, Ontario
Sandra Mairs RN, BScN, MHSc(N), GNC(C)	Professor, Collaborative BScN Program Durham College/University of Ontario Institute of Technology Oshawa, Ontario
Peggy McDougall RN, MSc(A)	Staff Nurse Bruyère Continuing Care Ottawa, Ontario
B. McGibbon Lammi MSc BHSc(OT), OT Reg.(Ont.)	Policy Analyst Canadian Association of Occupational Therapist Ottawa, Ontario
Rola Moghabghab NP-Adult, BScN, MN, GNC(C)	Nurse Practitioner - Geriatric Emergency Management St. Michael's Hospital Toronto, Ontario
Emily Parsons RN, BScN, MN, GNC(C)	Clinical Nurse Specialist – Geriatric Emergency Management Nurse Grand River Hospital Kitchener, Ontario
Susan Phillips RN, MScN, GNC(C)	Geriatric Nurse Specialist The Ottawa Hospital, Ottawa, Ontario

Sharon Ramagnano RN, BScN(E), MSN/MHA, ENC(C)	Advanced Practice Nurse Emergency/Trauma Sunnybrook Health Sciences Center Toronto, Ontario
Ping Rau RN, MSc, CPMHN(C)	Clinical Practice Leader Rouge Valley Health System Ajax, Ontario
Tiziana Rivera RN, BScN, MSc, GNC(C)	Chief Practice Officer York Central Hospital Richmond Hill, Ontario
Dorene Rosmus RN, BN, GNC(C)	Education Coordinator Interlake Regional Health Authority Selkirk, Manitoba
Tess Sheldon MSc, JD, LLM	Staff Lawyer ARCH Disability Law Centre Toronto, Ontario
Judy Smith RN, BScN, MDE, ENC(C)	Geriatric Emergency Management Nurse York Central Hospital Richmond Hill, Ontario
Orla Smith RN, BScN, MN, CNCC(C)	Research Manager, Critical Care St. Michael's Hospital Toronto, Ontario
Denise Sorel RN, BScN, CIC	Project Manager Canadian Patient Safety Institute Edmonton, Alberta
Lily Spanjevic RN, BScN, MN, GNC(C), CRN(C)	Advanced Practice Nurse – Geriatrics, Medicine Joseph Brant Memorial Hospital Burlington, Ontario
Stanley Stylianos BS, BA	Program Manager Psychiatric Patient Advocate Office Toronto, Ontario
Susanne Swayze RPN	Secure Forensic Staff Nurse St.Josephs' Healthcare Hamilton Hamilton, Ontario
Irina Sytcheva MSW, RSW	Policy and Advocacy Coordinator Schizophrenia Society of Ontario Toronto, Ontario
Fran Szypula RN, BScN, CPMHN(C)	Nurse Educator St. Joseph's Healthcare Hamilton, Ontario

Heather Thompson RN	Long-Term Care Best Practice Guideline Coordinator North East, Local Health Integration Network Registered Nurses' Association Ontario Toronto, Ontario
Andrea Trainor RN, BSc(N), MSc(A)	Advanced Practice Nurse Bruyère Continuing Care Ottawa, Ontario
Dania Versailles RN, BScN, MScN, CVAA(C)	Clinical Nurse Specialist Hopital Montfort Ottawa, Ontario
Natalie Warner RN, MN	Long-Term Care Best Practice Guideline Coordinator Central East, Local Health Integration Network Registered Nurses' Association Ontario Toronto, Ontario
Luana Whitbread RN, BSc, BN, MN, GNC(c)	Clinical Nurse Specialist Personal Care Home Program Winnipeg Regional Health Authority Winnipeg, Manitoba

Purpose and Scope

Best practice guidelines are systematically developed statements to assist practitioners' and clients' decisions about appropriate health care (Field & Lohr, 1990).

This guideline provides evidence-based recommendations for Registered Nurses (RNs) and Registered Practical Nurses (RPNs) related to the care of individuals who are at risk for behaviours that may result in harm to self/others and lead to the possible use of restraints (physical, chemical, environmental). ***Unless otherwise indicated in the guideline, the discussion focus is on physical restraint.***

It is the intent of this document to assist RNs and RPNs to focus on evidence-based best practices within the context of the nurse-client relationship and on strategies for assessment, prevention and use of alternative practices (including de-escalation and crisis management techniques) to prevent the use of restraints, and move towards restraint-free care in diverse settings such as acute, long-term and home health-care.

The Appendices included at the end of this guideline are provided as examples of the types of tools in use from various organizations. The content of these documents may or may not align with the terminology or definitions of terms (see Appendix A) used within this document. The examples can assist interprofessional team members and organizations to understand the application of the concepts presented within the discussion of evidence, and to explore what type of tools would be required.

> ***The movement towards the use of alternative practices for restraint-free care cannot apply to all organizational setting (e.g. Policing and Corrections), as these settings are beyond the scope of this guideline.***

Nurses play a significant role in client safety through implementation of alternative strategies to prevent the use of restraints and to avoid the potential harmful outcomes associated with the use of restraints. It is acknowledged that this guideline cannot encompass all organizational settings and populations due to lack of research in some practice areas. This guideline seeks to bring forth the best available research findings in the form of recommendations. However, we do support the review of *Promoting Safety: Alternative Approaches to the Use of Restraints* by nurses to identify the best practice recommendations most appropriate for implementation within any institution that pertains to the practice of nursing and within the context of any Federal and Provincial regulations governing the setting and populations served.

An attempt has been made throughout this document to identify to the reader the research population and health sector where the research was conducted. However, lack of research studies in some health-care sectors such as home health-care, specialty areas such as procedure/treatment and operating rooms, and special populations such as paediatrics, have resulted in some limitations. Nurses working within these areas should review each recommendation and supporting discussion of evidence for applicability to the setting and population to ensure the promotion of safety within the context of that environment.

> ***Nurses working in any health care setting must be aware of the legislation that pertains to their geographic location, health care sector type and client population as they move towards the implementation of best practices to support restraint-free environments.***

It is intended that this guideline will be applicable to all domains of nursing including clinical, administration and education to assist nurses' to become more comfortable, confident and competent when caring for individuals at risk for harm to self/others.

This guideline focuses on three areas:

i. Assessment, Prevention and Alternative Approaches;
ii. De-escalation Interventions and Crisis Management; and
iii. Restraint Use Focused on Client Safety.

This guideline can provide support for nurses who are considering the use of restraints as a last resort, for the shortest duration of time when prevention, de-escalation and crisis management strategies have failed to keep the individual and/or others safe.

No research or best evidence was found to guide the development of specific recommendations appropriate for all clients who are restrained related to the best type of restraint to be used and monitoring routines.

It is important that nurses, in collaboration with the interprofessional team, know their client's history (trauma/preferences) and work with the client to identify alternatives to the use of restraints and if needed, the best restraint option to be used as a last resort. Nurses working within organizations must be aware of the organization specific policies and procedures in order to identify what is a restraint versus a Personal Assistance Service Device (PASD), and what monitoring and observation practices must be in place when restraints are used.

It is acknowledged that effective health care depends on a coordinated interprofessional approach that incorporates ongoing communication between health-care professionals and clients/families and substitute decision-makers (SDM).

Responsibility for Development

Promoting Safety: Alternative Approaches to the Use of Restraints guideline development was funded by the Ontario Ministry of Health and Long-Term Care as a result of recommendations from the Coroner's Inquest, in Ontario, Canada held from September 18th to October 10, 2008. The inquest was to review the death of an individual who had just been released from restraints who subsequently died, with cause of death identified as acute pulmonary embolism. Contained in the report were the following recommendations associated with the creation of a guideline on the topic of restraints:

Registered Nurses' Association of Ontario (RNAO)

61. That the RNAO should develop a nursing best practice guideline for the use of restraints in psychiatric clients, in consultation with relevant stakeholders such as the Ontario Nurses' Association.

62. That the best practice guideline should be provided to nurses with the use of a toolkit.

To access the full verdict of the Coroner's Jury, visit http://www.sse.gov.on.ca/mohltc/PPAO/en/Documents/sys-inq-jam.pdf

In April 2010, a panel with expertise in practice, education and research from multiple healthcare settings and sectors was convened under the auspices of the RNAO. The panel discussed the purpose of their work and came to consensus on the scope of the best practice guideline, client safety and alternative approaches to the use of restraints. Subsequently, a search of literature for clinical practice guidelines, systematic reviews, relevant research studies and other types of evidence was conducted. See Appendix B & C for details of the search strategy and outcomes.

Background Context

In June 2001, the province of Ontario in Canada enacted the *Patient Restraints Minimization Act, 2001 (Bill 85)* (available at: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_01p16_e.htm). Since then, health-care facilities have created policies and practices to minimize the use of physical and chemical restraints and encourage the use of alternatives (Ralphs-Thibodeau et al., 2006). Despite the enactment of the Patient Restraints Minimization Act, 2001 and a plethora of organizational policies and procedures, front line health care providers continue to voice strong concerns regarding the use of restraints. Reports of injury and death continue to occur, even when "less restrictive" methods such as seat belts are used as restraints. In mental health, the use of restraint is not consistent with a recovery model that focuses on client control, empowerment and involvement in their own care (Huckshorn, 2004; Mental Health Commission of Canada, 2009; Schrank & Slade, 2007). Front line health care providers continue to apply restraints, voicing concerns that restraint-free or least restraint policies and a lack of alternatives would increase the risk of harm to clients and others (including staff), while increasing workload and the risk to organizations (Johnson, Ostaszkiewics, & O'Connell, 2009; Livingston, Verdun-Jones, Brink, Lussier, & Nicholls, 2010; Nay & Koch, 2006; Ralphs-Thibodeau et al.; Ryan & Bowers, 2006).

Restraints as defined by the College of Nurses of Ontario (CNO), (rev. 2009c) are physical, environmental or chemical measures used to control the physical or behavioural activity of a person or a portion of his/her body. Physical restraints limit a client's movement. ***Physical restraints*** include a table fixed to a chair or a bed rail that cannot be opened by the client. ***Environmental restraints*** control a client's mobility. Examples include a secure unit or garden, seclusion or a time-out room. ***Chemical restraints*** are any form of psychoactive medication used not to treat illness, but to intentionally inhibit a particular behaviour or movement.

Seclusion, with or without restraint, is a measure used as an intervention to manage clients that remains poorly documented in health-care settings. Feng et al. (2009) undertook a cross-national study on restraint use and antipsychotic use in long term care homes and identified the prevalence of physical restraint use to be varied more than five-fold across the study countries – from an average 6% in Switzerland, 9% in the United States, 20% in Hong Kong, 28% in Finland, and over 31% in Canada. A study by Minnick, Mion, Johnson, Catrambone, & Leipzig (2007) outlined the prevalence of physical restraint use in hospitals in the United States of America as 50 per 1,000 patient days. A recent study by Dumais, Larue, Drapeau, Menard, & Giguere Allard (2010) on 2,721 psychiatric patients in Canadian mental health care facilities found that 23.2% of clients had been placed in seclusion and that 17.5% of them had been secluded with (physical) restraint.

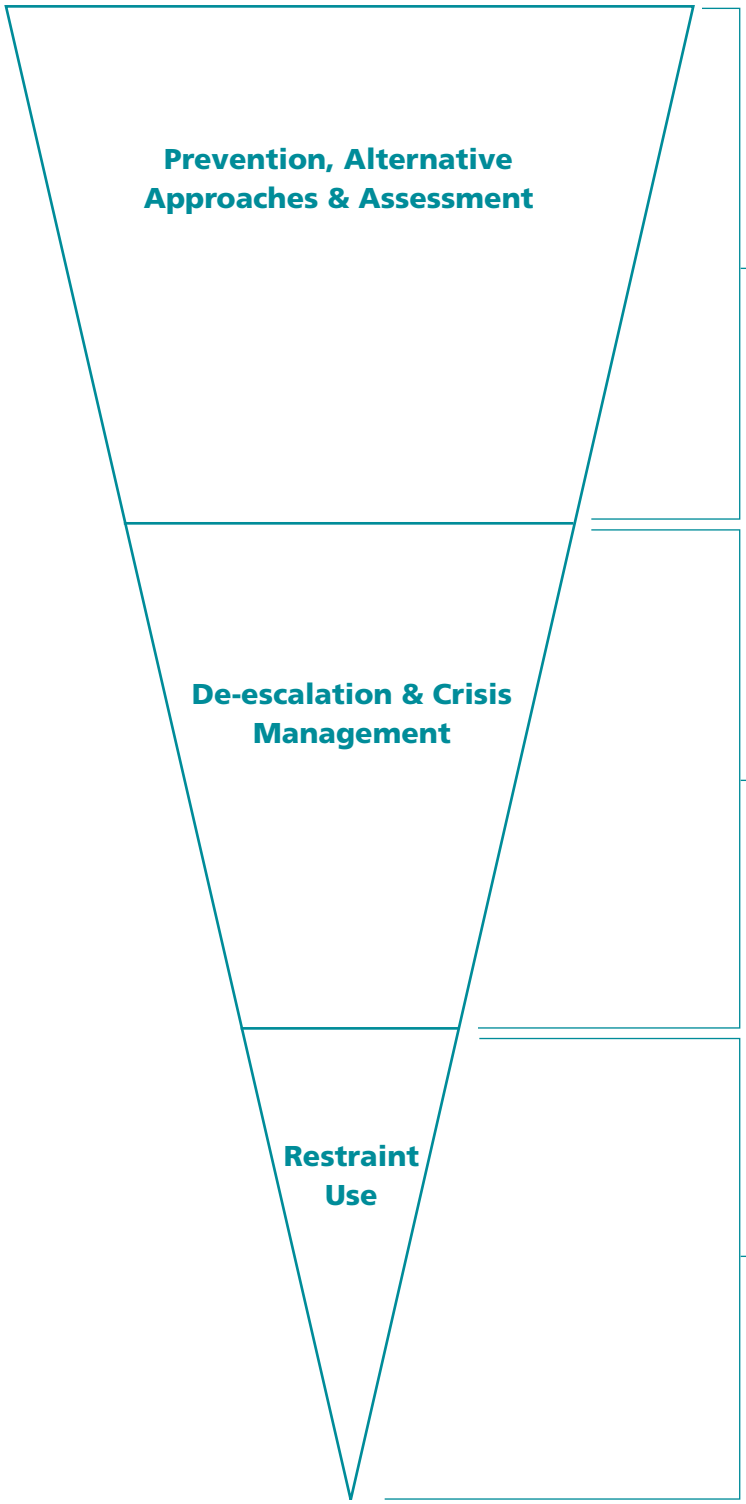
The use of physical restraints to prevent falls and injuries has not been proven and might even increase risk of falls (Evans, Wood, & Lambert, 2002). The prevention of behaviours such as aggression, wandering and treatment interference has been reported to be associated with several harmful physical, psychological and social effects to the client such as impaired mobility, cognition and social function and behavioural symptoms (Pellfolk, Gustafson, Bucht, & Karlsson, 2010). Short-term restraint use has been associated with sudden death arising from deep vein thrombosis and pulmonary embolism (Dickson & Pollanen, 2009).

It was the consensus of the guideline development panel that the use of a model in tandem with guiding principles was a critical starting point in the development of the guideline for nurses in order to promote a move towards restraint-free environments for individuals at risk of demonstrating behaviours of harm to self/others.

The guideline development panel believes that a move towards a restraint-free environment is demonstrated in the model, Promoting Safety: Alternative Approaches to the Use of Restraints represented in Figure 1. The first focus is predominately on prevention, alternative approaches and assessment; the second focus on implementation of alternative approaches including use of de-escalation interventions and crisis management; the last focus of care is restraint use as a last resort only after all other alternatives have proven ineffective, thus adopting a paradigm shift towards a restraint-free culture that focuses on alternatives to restraint, rather than just minimizing restraints.

Figure 1: Model

Promoting Safety: Alternative Approaches to the Use of Restraints



Prevention, Alternative Approaches & Assessment:

- Client Safety: myths & truths; risk factors; psychological impacts
- Cultural Contest, Harm Reduction Philosophy, Ethics
- Assessment: algorithms/tool; prevention & safety strategies
- Prevention Strategies:
  - Behaviour Support
  - Individualized Plan of Care
  - Understanding behaviour re unmet needs
  - Sensory teaching, self-soothing stratgies
- School/Curriculum & education programs

Crisis Management & De-escalation Interventions:

- Communication: cognitive impairment
- De-escalation Techniques: emergency vs. non-emergency
- Verbal/Non-verbal Diffusing Skills
- Understanding the Crisis Escalation Process
- Post-Crisis Activities: debriefing
- Harm Reduction

Observation & Evaluation Practices

Restraint Use as a Last Resort:

- RN/RPN Scope of Practice
- When All Other Alternatives Have Proven ineffective
- Safe Use of Restraints: application; monitoring; tapering use; and discontinuation
- Debriefing
- Organization:
  - Culture, philosophy, policy

Quality improvement program

The guiding principles used to assist in the development of the *Promoting Safety: Alternative Approaches to the Use of Restraints* guideline are as follows:

Guiding Principles/Assumptions in *Promoting Safety: Alternative Approaches to the Use of Restraints*

- Clients – patient, resident, consumer, family, significant others, substitute decision-maker (SDM) – are active partners in care to the extent of their capacity and in collaboration with the interprofessional health-care team.
- The philosophy of individualized care is foundational to the therapeutic nurse patient relationship.
- All client behaviour has meaning that is contributing to the underlying cause.
- Prevention of the use of restraints starts with assessment and use of alternative approaches.
- De-escalation techniques for crisis management can be used as a prevention strategy to avoid the use of restraints.
- Leadership is required across all organizational and health care sector levels to create a move towards restraint free environments.
- When restraint use is unavoidable, the least restrictive form of restraint is used for the shortest duration of time for avoidance of harm to self/others; restraint use is temporary and alternatives must continue to be considered.

Practice Recommendations for Assessment, Prevention and Alternative Approaches to the Use of Restraints

RECOMMENDATION 1

Nurses establish a therapeutic relationship with the client who is at risk of harm to self/others to help prevent the use of restraints.

Level of Evidence = IV

Discussion of Evidence

Evidence exists that the therapeutic relationship developed between clients and staff contributes to decreased disturbed/aggressive behaviour (National Collaborating Centre for Nursing and Supportive Care [NCCNSC], 2005). The therapeutic relationship is foundational for trust, therapeutic communication and understanding the meaning of the client's behaviours (RNAO, rev. 2006b). As trust develops in the relationship, so does the ability of the nurse to effectively utilize therapeutic communication techniques to explore emotions, thought content and behaviour with the client to assist in the development of a plan of care that allows for implementation of interventions where de-escalation is needed to prevent or minimize behaviours which increase the risk for restraint use. Often when trust is established, clients are more receptive to therapeutic communication and calming techniques when situations arise. Understanding the client's experience facilitates the success of de-escalation and crisis management strategies to help prevent or minimize the behaviours that increase the risk for restraint use.

The CNO (rev. 2009d) Therapeutic Nurse Client Relationship Standard identifies that at the core of nursing is the therapeutic nurse-client relationship, a key relationship that supports the client's health and well-being. This relationship must be based on empathy, respect and trust which requires appropriate knowledge of professional intimacy and the awareness by the nurse of the inherent power in a health care professional's role. CNO (rev. 2009d) identifies that the nurse is to protect the client from harm and ensure the relationship is psychotherapeutic. Knowing the client as a unique individual helps the nurse observe for triggers or cues in order to understand the meaning of the client's behaviour and to individualize interventions that help prevent and manage behaviours that may put the client at risk for restraint use. All behaviour has meaning and it is important to determine the triggers or reasons for the behaviour so that effective interventions can be planned to ensure the client's safety and well-being. Johnson & Hauser (2001) indicate it is important to understand the meaning of the client's behaviour in the context of the situation and the nurse-client interaction to identify the right interventions that match the client's needs.

Bonner, Lowe, Rawcliffe, & Wellman (2002) explored the subjective experience of physical restraint for mental health clients. Findings identified that clients perceived they would have benefited from more time with staff before and during the duration of the restraining process. Spending time with clients would assist the nurse and interprofessional team to come to know the client and facilitate collaboration with the client to seek or consider internal factors (e.g. illness) or external factors (e.g. environment) that could contribute to emerging disturbed and/or aggressive behaviour. Penn Nursing Science, University of Pennsylvania School of Nursing has a *Subjective Experience of Being Restrained* (SEBR) (see Appendix E) structured interview guide that is an example of a tool that can facilitate discussions between nurses and clients to gain insight on restraining episodes.

A study by Holmes, Kennedy, & Perron (2004) demonstrated that nurse-client contact was important in crisis management. Their findings suggested that a lack of nurse-client contact during seclusion impacted on the negative perception and emotional experience of clients.

A therapeutic nurse-client relationship enhances effective communication. A qualitative study by Kontos & Naglie (2007) explored personhood and communication as a means to enhance person-centered dementia care. Clients living with dementia gradually lose the ability to maintain their social roles. Recognizing this social role to be a partial component of the individual which is outwardly expressed and understanding the internal notion of a client's true self by seeking to learn about the client's true personhood would allow nurses to connect with clients on a deeper level (e.g. individual was previously a caretaker at a school who always worked evening shift and enjoyed planting flowers as a hobby). This helps to enhance the nurse-client interaction in the delivery of nursing care when managing responsive behaviours such as agitation and aggression (Kontos & Naglie; RNAO, rev.2010a).

RECOMMENDATION 2

Nurses should assess the client on admission and on an ongoing basis to identify any risk factors that may result in the use of restraints.

Level of Evidence = IIb

Discussion of Evidence

Nurses must assess on admission the potential for the presence of predisposing and precipitating factors that put the client at risk for the use of restraints. There are multiple predisposing and precipitating factors (see Figures 2 and 3) identified in the literature as contributing to the nurse's decision to use restraints when caring for clients. Recognizing the individual who may be at risk of the need for restraint use and implementing alternative strategies to prevent the use of restraints is one goal of client safety. Predisposing and precipitating factors can be influenced by the client's age as well as other situational factors which individually or combined result in behaviours that may influence a nurse's decision to consider the use of restraints to prevent harm to the client and/or others. Some predisposing risk factors may also act as precipitating risk factors. When clients with predisposing risk factors experience a new situation, the predisposing risk factors may increase or become more emphasized than previously experienced.

Client admission processes must include the nurse's understanding of the client's diagnoses and conducting an assessment of the client's history for any predisposing characteristics or known precipitating factors that would place the client at risk. When factors are identified they should be clearly documented and communicated to the interprofessional team. There is a lack of robust studies from all health-care settings to help the nurse understand and anticipate all possible predisposing and precipitating factors that could be associated with the risk of restraint use. Client characteristics and precipitating factors affect all age ranges and health-care sectors (e.g. acute, long-term[LTC] and community care) and there are special considerations for some populations such as geriatric, mental health, trauma and paediatrics. The majority of studies focus on the older adult, those in mental health, LTC or acute care settings. A quantitative study by Bourbonniere, Strumpf, Evans, & Maislin (2003) found that the following client characteristics may be overlooked as variables in the use of restraints: severely impaired mental state; English as a second language; use of sedation; and sensory-perceptual loss that affects the ability to communicate.

Understanding a client's history, the circumstances leading to the client's admission and the potential influences of the environment is very important on initial assessment for the development of a plan of care that incorporates prevention and alternative approach strategies to the use of restraints. Nurses should take into consideration not only the client characteristics but also factors associated with certain client populations that are known to result in the use of restraints. Nurses need to

understand environmental or non-clinical precipitating factors such as congestion in hallways, waiting time for an elevator at meal time, noise levels in the facility, relocation to new home or facility, exposure or lack of exposure to music and/or social activity, staff attitude and staffing ratios or staffing changes at the facility may trigger challenging client behaviours that put the individual at risk for the use of restraints (Shah, Chiu, Ames, Harrigan, & McKenzie, 2000).

Predisposing Risk Factors

Emerging evidence suggests nurses should assess clients for evidence of predisposing characteristics that can contribute towards the potential increase of restraint use. Figure 2 summarizes some predisposing risk factors and associated examples that may include pre-existing behaviours or dementia (diagnosed/not diagnosed) that may be characteristics of the client's health.

Figure 2

Examples of Predisposing Risk Factors for Restraint Use
1. Advancing Chronological Age
2. Cognitive Changes • Moderate-severe dementia • Trauma
3. Decreased/Inability to Communicate • Aphasia
4. Fecal & Urinary Incontinence
5. History of Falls/ Fear of Falls
6. Increasing Dependence • Decline in mobility • Increasing dependence for activities of daily living
7. Psychiatric Conditions
8. Responsive Behaviours • Aggression, history of violence, injury to self or others • Anxiety • Challenging/Disruptive behaviours • Restlessness, wandering • Risk of injury to self or others
9. Sensory Impairments • Deafened or hard of hearing • Blind or low-vision impairment

1) Advancing Chronological Age

Nurses should be aware that age in combination with other predisposing characteristics such as cognitive decline might result in behaviours such as wandering, which may influence the nurse to consider the use of restraints. A study by Engberg, Nicholas, Castle, & McCaffrey (2008) identified that an age greater than 80 years is a characteristic of individuals who have been restrained.

2) Cognitive Changes

Delirium, dementia, depression and confusion with or without wandering are all risk factors for restraint use. Nurses' awareness and assessment for behaviours that are a result of cognitive functional decline is vital to implementing strategies that would prevent the use of restraints. Kotynia-English, McGowan, & Almeida (2005) examined the implementation and efficacy of an Interprofessional Psychogeriatric Team (IPT) for clients in long-term care homes who screened positive for psychiatric morbidity (depression, dementia etc.) and health outcomes. One health outcome variable observed was restraint use. Screening and early referral to the IPT did not significantly change the use of restraints, however, the study process allowed for early identification on admission for clients at risk for restraint use. Clients with altered cognition as a predisposing factor appear to have a higher risk of restraint use. Cognitive impairment may also act as a precipitating risk factor.

3) Decreased/Inability to Communicate

1. Nurses should be aware that certain clients (e.g. Stroke survivors with aphasia, Alzheimer's disease) may not be able to communicate their needs. The Canadian Coalition for Senior's Mental Health (CCSMH) (2006) identifies that all client's behaviour has meaning and often is associated with unmet needs. Understanding the reasons for some of the behavioural changes associated with a client's inability to communicate is a first step towards developing care strategies that provide alternatives to the use of restraints. There is limited research related to inability to communicate in restraint literature however, clinical expertise would substantiate the importance of identifying this predisposing factor in client assessment. The Alzheimer Care: Ethical Guidelines, Restraints (2011) available at: http://www.alzheimer.ca/english/care/ethics-restraints.htm suggest it is important to:
    a. *Identify the problem by taking a moment to reflect on the client's behaviour.*
    b. *Analyze what the client is trying to communicate. Identify contributing factors may trigger the response.*
    c. *List strategies to possibly resolve the issue. Choose the most appropriate one to implement.*
    d. *Assess the chosen strategy and analyze why it did/did not work. Should another strategy be tried?*

4) Fecal and Urinary Incontinence

Nurses' awareness of the client's ability to be independent and to ambulate for toileting is key for the safety of the client. Decreased independence in toileting can place a client at risk for restraints. Nurses should be aware of an increase in risk for agitation or aggressive behaviours in clients whose precipitating factor is the fear of not being able to toilet and/or fear of incontinence (Putman & Wang, 2007). The nurse must also assess whether the client would attempt to ambulate independently to avoid incontinence, which may result in a fall. Cognitive performance, incontinence and visual impairment are identified as risk indicators for restraint use that requires further investigation (Becker et al., 2005).

5) History of Falls/Fear of Falls

Concerns about the safety of clients can result in restraint use when risk factors for falls have been identified. Nurses with other members of the interprofessional team must assess clients for risk factors for falls on admission and implement in the plan of care individualized multifactoral interventions that would prevent the use of physical restraints, including the use of restrictive siderails (RNAO, rev. 2011; Safer Healthcare Now! [SHN], 2010). Engberg et al. (2008) found that falls, or an increase in falls post admission to LTC, was associated with the introduction of a restraint. Rask et al. (2007) studied the effects of a quality improvement falls management program that included education for nurses on the following eight-step fall response paradigm:

Within 24 hours of a resident falling:

1. Evaluate and monitor the resident;
2. Investigate the circumstances surrounding the fall;
3. Record circumstances, resident outcome and the staff response to the event;
4. Fax an alert to the Primary Care Physician;
5. Initiate immediate interventions;

Within one to seven days:

6. Conduct a falls assessment on the resident;
7. Develop a resident-specific plan of care; and
8. Post fall (one to six months) continue to monitor the implementation of specific interventions and the resident's response.

Rask et al. was able to demonstrate a substantial reduction in the use of restraints and falls from the improved care processes and documentation based on the use of this response paradigm in the participating long-term care homes.

6) Increasing Dependence

a. Activities of Daily Living (ADLs) Performance

Clients who are unable to independently perform their ADLs have been shown to be at an increased risk for the use of restraints in long-term care homes. Kirkevold & Engedal (2004) found a strong independent correlation of restraint use with low ADL performance. Engberg et al. (2008) confirmed that low independence in performing ADL, history of falls, and low cognitive scores were associated with the initiation of a physical restraint.

b. Decline in Mobility

Wandering, dependency on others for ambulation, history of falls and high risk for falls are all factors associated with restraint use. Ability to mobilize independently is a key characteristic that should be assessed by the nurse to ensure client safety. Becker et al. (2005) notes that residents in LTC who were unable to transfer independently experienced a higher fall risk and restraint use. Engberg et al. (2008) studied residents in long term care homes and found those residents who were restrained exhibited low cognitive performance, low ADLs and more walking dependence than non-restrained residents. Rask et al. (2007) identified the loss of independence in ADLs, being bedridden, decline in range of motion, use of nine or more medications, no discharge potential, and presence of pressure ulcers as common resident characteristics related to mobility that resulted in the use of restraints.

7) Psychiatric Conditions

The emerging literature reflects that certain combinations of behaviour characteristics with the presence of a psychiatric diagnosis place clients at increased risk for the use of restraints that includes seclusion (Kaltiala-Heino, Tuohimaki, Korkeila, & Lehtinen, 2003).

Adult:

Characteristics of restrained adults in mental health settings include (Downes, Healy, Page, Bryant, & Isbister, 2009; Flannery, Rachlin, & Walker, 2002; Hellerstein, Staub, & Lequesne, 2007):

- Violence as a result of self poisoning;
- Alcohol and drug intoxification or withdrawal;
- Psychiatric organic illness;
- Personality disorder;
- Agitation; and
- Older persons with schizophrenia.

Youth:

Characteristics of restrained youth in psychiatric settings include (Delaney & Fogg, 2005):

- Male gender;
- Multiple admissions to the facility;
- Longer hospitalizations;
- Diagnosis of a psychotic disorder;
- Previous psychiatric hospitalization;
- Enrolled in special education, in foster care or in custody of the Department of Children and Family Services;
- History of voicing suicidal ideation and attempting suicide; and
- Threatening, agitated or assaultive behaviours.

8) Responsive Behaviours

- **Aggression, history of violence, risk of injury to self or others:**
  Nurses should be aware of the client's safety and potential for harm to self/others when the client exhibits aggressive behaviours. Moderate and severe dementia and aggressive behaviours are client characteristics associated with the use of restraints (Kirkevold & Engedal, 2004).

- **Anxiety, Challenging/Disruptive behaviours:**
  Nurses need to help clients recognize their internal emotional states and identify any precipitating factors in order to assist the client in the development of self-control strategies that would increase the use of appropriate responses. Dean, Duke, George, & Scott (2007) outline that challenging behaviours should be managed by strategies that prevent or minimize the use of restrictive interventions (e.g. least restraints) and include engaging the client in the use of other appropriate responsive behaviour options.

- **Restlessness/Wandering:**
  Nurses should be aware that client restlessness may trigger behaviours such as wandering or treatment interference and is a discriminating factor for restraint application (Choi & Song, 2003).

- **History of Self-injury:**
  Nurses should identify predisposing factors that may raise the concern for client potential to self injure. In long-term care homes, self-injurious behaviours were found in 22% of the clients with dementia and correlated with the use of benzodiazepine and/or the use of restraints (de Jonghe-Rouleau, Pot, & de Jonghe, 2005). These clients were more often immobile, restrained in bed and had been prescribed benzodiazepines. Self-injurious behaviours included head banging, biting and scratching of oneself (de Jonghe-Rouleau et al.). Self-injury or harm can also be accidental and non-intentional such as those carried out during dissociative states found in psychiatric populations (National Institute for Clinical Excellence [NICE], 2004).

9) Sensory Impairments

Hearing and vision impairments in clients are concerns that should be assessed by the nurse and interprofessional team to help keep the client safe. Hearing and vision impairments have been strongly associated with falls and initiation of restraints (Lee, Hui, Chan, Chi, & Woo, 2008; Putman & Wang, 2007).

Precipitating Risk Factors

The nurse will need to assess and monitor the client for any additional precipitating risk factors (Figure 3) that may occur as a result of changes to the normal client situation such as, admission to a health-care setting that could potentiate the development of behaviours at risk for restraint use. It is generally acknowledged that the greater the number of risk factors (predisposing and/or precipitating), the greater the risk for restraint use. Many of the precipitating risk factors for restraint use may have previously been predisposing factors but the change in settings and client situation threatens the client's ability to cope.

Figure 3

Examples of Precipitating Risk Factors for Restraint Use
Cognitive Changes: • Delirium • Dementia • Sundowning • Unable to remember instructions
Decreased Mobility: • Bedridden • Lack of assistive devices
Environmental Factors: • Music • Noise • Temperature • Unfamiliar environment
Falls
Medications Influences: • Alcohol and substance abuse • Benzodiazepines • New medications • Polypharmacy • Psychoactive agents • Unanticipated side effects
Multiple Admissions
Surgery/ Procedural Interruptions
Unmet needs: • Anxiety • Fear • Hunger • Pain • Thirst • Toileting

Cognitive Changes:

In addition to the information outlined in the predisposing risk factor section for cognitive changes, the nurse will need to continue the monitoring of clients for new cognitive changes, such as the onset of a delirium superimposed on a pre-existing dementia, which can then lead to the potential for restraint use. (RNAO, rev. 2010a,b).

Decreased Mobility, Falls

In addition to the information outlined in the predisposing risk factor section for impaired mobility, it is very important for nurses to know what devices are used as essential components for the safety of the client and not intended to work as a restraining devices. An example would be the use of siderails to prevent harm in the transportation of clients or the use of siderails in specialty areas such as operating or procedure rooms, recovery room, intensive care and paediatric settings. Siderails may not be considered a physical restraint under these circumstances but should be reviewed to ensure the use is protective, and an essential component for the safety of the client. Current literature supports a focus on understanding the cause of client's behaviour and the promotion of alternative individualized multifactorial strategies for clients at risk for falls rather than trying to control behaviour through the use of restraints. A systematic review by Ng, McMaster, & Heng (2008) demonstrated there is no evidence to support that restrictive siderail use prevents falls in acute care hospital settings. Studies continue to demonstrate a decrease in injury from falls with no change in rate of falls when physical restraints and restrictive siderails are not used (RNAO, rev. 2011).

Environmental Factors

Nurses should be aware of agitation or anxiety in clients that may be triggered by environmental factors and create strategies with the interprofessional team to prevent or minimize these influences and prevent the use of restraints. Putman and Wang (2007) identified the importance of understanding any contributing factors in nursing home environments related to resident behaviours associated with agitation or anxiety. Nobili et al. (2008) compared Alzheimer Special Care Units (ASCU) to traditional long term care homes and found that clients with dementia admitted to ASCU had lower rates of hospitalization, use of physical restraints and a higher withdrawal from antipsychotic agent use. The ASCU staff was interprofessional (physicians, nurses, psychologists, rehabilitation and occupational therapists) and trained in the assessment of behavioural problems and the stimulation of residual cognitive and functional performance through use of various activities, occupational therapy and individualized care. Each ASCU had to implement a specifically designed program on environmental renewal which included the creation of wandering areas, separate areas for structured activities, minimization of noxious stimuli, bright coloured room doors/hand rails to facilitate identification, neutral wall colours, secured magnetic-locked exit doors with digital codes for release to open and wayfinding cues to help residents identify different areas and routes).

Medication Influences

Benzodiazepines and psychoactive agents such as antidepressants and substance abuse, including alcohol, increase a client's risk for restraint. Upon client admission and on a routine basis nurses must assess the impact of the client's medication use on behaviour that places the client at risk for the use of restraints. The initiation of restraint use was found to be associated with a previous fall and use of psychoactive medication (RNAO, rev. 2011). While medication is often initiated for its therapeutic effects, the side effects that may occur from the use of the medication and/or abuse or dependency on the medication can result in responsive behaviours associated with the use of restraints (Engberg et al., 2008; Möhler, Richter, Köpke, &, Meyer, 2011; Putman & Wang, 2007).

Multiple Admissions

See Predisposing Factor # 7 Psychiatric Conditions.

Surgical/Procedural Interventions

Certain health-care environments require appropriate decision-making regarding what is an essential component of the procedure to ensure the client is safe and protected from harm. Treatment processes that occur in health-care settings such as operating/recovery rooms and intensive care units can often trigger fear, confusion and anxiety in clients. This experience can create an environment that places the client at risk of developing responsive behaviours such as aggression or confusion and lead to treatment interruptions such as preventing the insertion or discontinuation of intravenous therapy. A study by Sullivan-Marx, Kurlowicz, Maislin, & Carson (2001) identified that physical restraint use post operatively was predicted by the presence of preoperative risk factors such as younger age (less than 85 years), confusion, dementia, requiring assistance/dependency in activities of daily living and the use of restraints preoperatively.

The CNO (rev.2009c) identifies that there are circumstances where the nurse may need to restrain a client who is not capable of understanding the necessity of an intervention (e.g. endotracheal tube inserted to assist in breathing). CNO outlines that certain circumstances require the appropriate use of restraints but that the client should receive explanations from the nurse as to why the restraint must be used and encourages discontinuation of the restraint as soon as safely possible.

- **Treatment Interruption**
  Nurses were more likely to use restraints if they perceived a client's safety was at risk of exhibiting behaviour that would interfere with medical/therapeutic interventions such as intravenous therapies or indwelling catheters (Ludwick, Meehan, Zeller, & O'Toole, 2008). Choi & Song (2003) identified that clients who were admitted to an intensive care unit and had a restraint applied for restlessness were exhibiting behaviours that nurses' felt might lead to the interruption of a medical device.

Unmet Needs

Nurses need to be aware that clients with declining ADLs may not be able to meet their basic needs (e.g. hunger, pain, thirst) and the presence of any predisposing factors such as anxiety, fear or the need to toilet may be actual precipitating factors that result in challenging client behaviours (aggression, harm to self/others) that result in the use of restraints (Engberg et al., 2008).

RECOMMENDATION 3

Nurses should utilize clinical judgment and validated assessment tools to assess clients at risk for restraint use.

Level of Evidence = IIb

Discussion of Evidence

Nurses' ability to identify on admission and throughout an episode of care those clients at risk for behaviours that may lead to harm of self/others is essential to safe client care. Overall a combination of clinical judgment with further evaluation by use of screening tools (if available) targeted to the identification of specific client factor(s) will help to identify clients at highest risk and can facilitate further referral and planning of interventions by the interprofessional team. The nurse with other members of the interprofessional team can then work with the client to develop preferred strategies for coping and to manage responsive behaviours leading up to and during a crisis event to prevent the use of restraints. The Massachusetts Department of Mental Health website http://www.mass.gov/eohhs/gov/departments/dmh/ has a Restraint/Seclusion Reduction Safety Initiative and gives some examples of age-appropriate interviewing tools for children, adolescent or adult clients that help identify predisposing/precipitating factors and plan for client preferred approaches. The children's tools are accompanied by pictures to help identify interview triggers, warning signs and what makes the child feel better.

Obtaining a thorough history from the client/family/SDM on admission and on an ongoing basis is important in determining the individual's risk for injury due to falls and/or cognitive impairment (RNAO, rev. 2010b; RNAO, rev. 2011; SHN, 2010). RNAO (rev. 2010b) outlines that the best use of any assessment tool is to first identify the specific risk factors so that prevention can be tailored to the identified risks. Furthermore, the comprehensive assessment should include a focused history, physical examination, medication review, cognitive, functional and environmental assessments to link any assessment findings to evidence-based interventions.

Assessment tools are available to assist nurses explore in depth the identified client risk factors that places them at risk for the use of restraints (Engberg et al., 2008; Yamamoto, Izumi, & Usui, 2006). The use of validated tools is helpful in identifying specific client needs when planning care as the tools facilitate the specific factor assessment. Some examples include:

- Cohen-Mansfield Agitation Inventory (CMAI) for assessment of agitation (Cohen-Mansfield, 1989);
- Staff Observation Aggression Scale-Revised (SOAS-R) (Tenneij, Goedhard, Stolker, Nijman, & Koot, 2009) for aggression;
- Short-Term Assessment of Risk and Treatability (START) (see Appendix F) for historical and current assessment of seven risk domains (violence, suicide, self-harm, self-neglect, unauthorized absence, substance use, and victimization);
- Broset Violence Checklist (BVC) (see Appendix G) to assess confusion, irritability, boisterousness, verbal threats, attacks on objects; or Historical-Clinical-Risk Management: 20 (HCR-20) (see Appendix H) to assess the historical and current risk for violence in psychiatric, corrections or forensic settings;
- Tools for altered cognition (delirium, dementia and depression [RNAO, rev 2010b]); and
- Tools for assessment of pain (RNAO, rev. 2007a).

Flannery et al. (2002) identifies that clients with a previous history of violence and or assault have an increased risk for restraint use. Hellerstein et al. (2007) describe a hospital-wide effort to decrease restraint and seclusion of clients in psychiatric facilities with interventions that include decreasing initial time in restraint from four to two hours before a new order was required, education of staff concerning identification of clients at risk of restraint or seclusion, early intervention to avoid crisis and use of a Coping Agreement Questionnaire (CAQ) (see Appendix I) to assess client preferences for dealing with agitation. The CAQ asks clients what makes them upset; how they have responded when upset; and how they would prefer to be treated while on the ward as well as obtaining family/substitute decision-maker (SDM) input on effective methods for coping. The use of a tool such as the CAQ may assist nurses with the interprofessional team to identify client specific prevention and alternative strategies that incorporate the client's own strengths and skills.

Aggressive behaviour can lead to increased use of restraints. Assessment helps to identify clients who may demonstrate aggressive behaviour as well identify any precipitating factors that contribute to aggressive episodes requiring ongoing behaviour management or crisis intervention (RNAO, rev. 2006b).

RECOMMENDATION 4

Nurses in partnership with the interprofessional team and client/family/substitute decision-makers (SDM) should create an individualized plan of care that focuses on alternative approaches to the use of restraints.

Level of Evidence = IIb

Discussion of Evidence

Collaboration among interprofessional colleagues is considered an essential strategy for ensuring client safety (Swauger & Tomlin, 2000). Nurses in collaboration with the interprofessional team and client/family/SDM should focus the plan of care on interventions that demonstrate an understanding of the client's needs and wishes in order to prevent and/or minimize behavioural symptoms that may be a reflection of unmet needs (CCSMH, 2006). Implementing alternative strategies in

the plan of care follows a thorough assessment of individual client characteristics that should include the client's level of orientation, physical and functional ability and environment factors (Dunn, 2001; Snyder, 2004).

The focus of nursing care management should be on identifying the factors that contribute to the behavioural presentations of unmet needs. When the reason(s) or cause(s) for the behaviour are identified, individualized interventions can be planned and used to assist the nurse, interprofessional team and client to resolve issues that may lead to the consideration of restraint use. Happ (2000) identified ascertaining the meaning of behaviour, staff continuity and presence, individualization of strategies and frequent re-evaluation, and persistence as key principles in non-restraint strategies to prevent treatment interference. Happ (2000) and Snyder (2004) identified best practice approaches to prevent treatment interference in the older adult (see Figure 4) and paediatric critical care settings (see Figure 5).

Figure 4

Non Restraint Strategies to Prevent Treatment Interference in Adults (Happ, 2000)

Explanation and Reminders
- Frequent verbal explanation
- Guided visualization of device
- Written reminder

Distraction and Diversion
- Activity apron
- Occupational therapy consult
- Writing tools
- Reading material
- Gadgets
- Photo albums
- Washcloths
- Empty tubing/packaging
- Music
- Television

Camouflage
- Long sleeved gowns
- Generous tape, ace wrap or dressings at site
- Commercial device-protective, cushioned sleeve, or IV site guard
- Abdominal binder
- Tubing out of visual field

Comfort and Positioning
- Repositioning/specialty mattress
- Tube stabilizer
- Augmentative communication
- Analgesia/sedation
- Aromatherapy
- Massage/touch therapies

Technologic Reduction

- Discontinue nonessential devices
- Intravenous adaptor
- Replace with less restrictive/less intrusive device

Environment

- Maximize Visualization
- Video camera
- Noise reduction
- Family presence
- Sitter/companion

Permission granted Copyright Clearnace Center

Figure 5

Nursing Intervention Strategies to Prevent Treatment Interference in Children
(Snyder, 2004)

- Establish rapport with child and family
- Provide child and family with pertinent information
- Provide child with creative and stimulating activities
- Attach devices in a way that maintains comfort
- Insert devices in locations that do not interfere with natural body movements
- Use camouflage that is lightweight and comfortable
- Use tape judiciously
- Prepare child adequately for stressful procedures
- Engage child while carrying out procedures
- Offer the child choices
- Use guided exploration
- Embrace family-centered care
- Choose interventions that may prevent treatment interference carefully
- Use distraction during stressful procedures

Permission granted Copyright Clearnace Center

Crock et al. (2003) identified that children can experience distress and pain during repeat procedural interventions of a diagnostic or treatment nature such as bone marrow and lumbar puncture tests. Pre-procedure assessments assist the nurse and interprofessional team to evaluate how frightened or upset the child is about undergoing the procedure and to evaluate approaches to care that can help minimize the risk of harm from responsive behaviours such as fear, anxiety, agitation or aggression (see Recommendation # 2, subsection: *Surgical/Procedural Interventions*). After the procedure there should be an evaluation with the client about the level of discomfort experienced to assist the nurse and interprofessional team in planning for future procedures to help minimize responsive behaviours associated with treatment interference (Crock et al.).

In order to fully understand the meaning of behaviour, address the unmet needs of clients and accurately determine the best client specific prevention and alternative approach strategies (see Appendix J - a sample list of alternate approach suggestions based on presenting behaviours) that would prevent or limit the use of restraints, the nurse must:

- **Understand factors that lead to behaviours** of harm to self/others that could result in considering the use of restraints and know all behaviour has meaning (see Recommendation # 2);
- **Assess the client for predisposing or precipitating factors** that may result in unmet needs demonstrated in behaviours for which a restraint may be considered (see Recommendations # 2 and # 3);
- **Develop a client-specific individualized plan of care** to meet a client's therapeutic needs and wishes as indicated by short- and long-term goals for the prevention or minimization of behaviours of harm to self/others;
- **Collaborate and communicate with the interprofessional team** to ensure an awareness of the plan of care which contains the prevention and alternative approach strategies and de-escalation preferences to be considered to avoid the use of restraints;
- **Continuously assess a client's response to prevention and alternative approach strategies** and evaluate and make changes to the plan of care and interventions. It may take several attempts to determine the alternative strategies that might work best for the client based on the presenting problem, to prevent or limit the use of restraints;
- **Be aware of their own personal values and knowledge of the clinical issues** to mitigate their own personal values or attributes which interfere with what the nurse knows to be the client's choices and values (CNO, rev. 2009b). Studies highlight the importance of self- awareness and self-management in influencing a nurse's ability to have therapeutic interactions and implement effective strategies. Johnson & Hauser (2001) found that nurses who were aware of their own values and emotional responses were able to remain calm and use therapeutic use of self to meet the needs of the client. Bigwood & Crowe (2008) examined mental health nurses' experience of physical restraint and found a primary source of conflict was the nurses' goal to maintain control and the professional values of the therapeutic relationship. Karlsson, Bucht, Eriksson, & Sandman (2001) found there was a significant relationship between nurses' decisions and their attitudes toward restraint use. Examples of evidence-based resources, tools and questionnaires are available to assist health-care providers' evaluate their own values associated with restraint use. An example website is the Penn Nursing Science, University of Pennsylvania School of Nursing available at: http://www.nursing.upenn.edu/cisa/Pages/Research.aspx which has the following questionnaires:
  - Primary Nurse Questionnaire (PNQ)
  - Perceptions of Restraint Use Questionnaire (PRUQ) (see Appendix K), with Matrix of Behaviours and Interventions Chart

There are many ways to approach the assessment and care of clients at risk for responsive behaviours that may lead to restraint use when developing the plan of care. O'Hagan, Divis, & Long (2008) describe advance directives and crisis plans as instructions to be completed while clients are not exhibiting responsive behaviours to indicate and direct health-care providers on what to do when clients get agitated or the treatment and support they prefer in a crisis. O'Hagan et al. outline that all individuals admitted to a facility should be assessed as soon as possible for violence risk, history of trauma and substance abuse so that nurses can work in partnership with the interprofessional team and client/family/SDM to develop a crisis prevention plan. This process should help to identify the triggers and early warning signs and facilitate the discussion and negotiation of strategies that the nurse and interprofessional team can apply to prevent and de-escalate responsive behaviours such as agitation or aggression (O'Hagan et al.).

There are multiple models of care that may assist nurses and the interprofessional team to work with clients/family/SDM such as:

- Wellness Recovery Action Plan ® (WRAP®) – http://www.mentalhealthrecovery.com/aboutwrap.php;
- P.I.E.C.E.S.™ – http://www.piecescanada.com/;
- Tidal Model – http://www.tidal-model.com/.

The underlying principle of any type of model or approach to care is to prevent and extinguish or minimize behaviours

that could be potentially harmful while reinforcing appropriate responsive behaviours in support of the client in crisis (Dean et al., 2007). The use of targeted client-specific interventions helps to minimize the risk of escalating responsive behaviours caused from precipitating factors and/or the demonstration of responsive behaviours that may not be appropriate. Use of multiple strategies in an individualized plan of care that takes into consideration client preferred strategies is the best approach to prevent the use of restraints. This plan developed prior to the client demonstrating responsive behaviours should be acknowledged and respected to support the needs of the client when in crisis. Some examples of how to identify and document precipitating factors, trends in behaviours and effective client preferred preferences can be seen in Appendix L, the Antecedent, Behaviour and Consequence (ABC) charting tool and Appendix M, the Behaviour Monitoring Log.

RECOMMENDATION 5

Nurses in partnership with the interprofessional team should continuously monitor and re-evaluate the client's plan of care based on observation and/or concerns expressed by the client and/or family/SDM.

Level of Evidence = IV

Discussion of Evidence

It is recommended that a repeat assessment should be done at regular intervals or in response to a significant change in the client's behaviour or functional status. The purpose of continual assessment is to identify symptoms that would require further investigation and allow the team to respond to changing needs and adjust prevention and management interventions (CCSMH, 2006). Routines established to monitor and reassess the effectiveness of interventions in the plan of care could be guided by legislation pertaining to the type of organization and/or client population (e.g. Ministry of Health and Long-Term Care: Long-Term Care Homes Act, 2007 and Ontario Mental Health Act, 1990). It is very important for nurses to be aware of any legislation pertaining to their organization and client population that helps to establish and guide these monitoring and reassessment routines. A structured or standardized approach to screening (e.g. use of protocols to assess for factors that place the client at risk for the use of restraints) is often helpful because tools and protocols can guide the nurses and interprofessional team to review more than one measure (e.g. self-report, proxy report and observation) and take into consideration other factors such as type of client, the client's unique history and diagnosis, specific triggers and setting. Again, based on setting and client population some assessment tools are mandated (e.g. Resident Assessment Instrument [RAI] Minimum Data Set [MDS] or the Functional Independence Measure [FIM] used in rehabilitation settings) (RNAO, rev. 2010a) and nurses should be aware of this type of mandated requirement. The findings from screening should trigger the use of a decision-making algorithm (see Appendix N) or use of a behaviour profile documentation form (see Appendix O) to guide nurses and the interprofessional team to implement a targeted assessment, initiate specific treatment for the identified symptoms and circumstances and ensure that the appropriate changes to interventions are made in the plan of care (CCSMH).

Ongoing assessment of client behaviours would alert the nurse and interprofessional team as to the immediate need to implement alternative strategies for prevention and/or de-escalation and crisis management techniques (RNAO, rev. 2006b; RNAO, rev. 2010a; RNAO, rev. 2010b). The plan of care should direct and promote ongoing assessment and evaluation of clinical outcomes and treatment effectiveness. This is critical for monitoring changes in the client and ensuring intervention objectives are aligned with client-centered goals (CCSMH, 2006; RNAO, rev. 2010a). The continuous monitoring will allow for the early identification of unexpected clinical outcomes and should trigger the assessment and review of the plan of care by the interprofessional team. Alternatively, continual assessment can also allow nurses and team members to identify improvements in client conditions indicating the client is responding to treatment modalities and/or individualized interventions resulting in a decreased risk for restraint use.

It is important for nurses to recognize that the process of screening and assessment is ongoing to detect changes in cognition, mood, behaviour and functioning and that the communication and documentation of the results of the assessment is critical to safe, quality client care and to prevent the use of physical restraints (RNAO, rev. 2010a). It is recommended that the nurse should obtain where appropriate and with the consent of the client, a collateral history from reliable informants, which may include relatives and caregivers, who can accurately identify changes in the client's behaviour (RNAO, rev. 2010b). The Documentation Standard (CNO, rev. 2008) supports nursing standards of practice and documentation that demonstrate the nursing assessment of the client's needs, identification of an individualized plan of care to meet client's therapeutic needs and wishes which reflects the client's perspective, that care is applied within the therapeutic nurse-client relationship and supports communication with the interprofessional team.

RECOMMENDATION 6

Nurses in partnership with the interprofessional team should implement multi-component strategies to prevent the use of restraints for clients identified at risk.

Level of Evidence = IIa

Discussion of Evidence

Studies (Ludwick et al., 2008; Vance, 2003) outline the complexities of decision-making that influence nurses' decision to use restraints. The knowledge and implementation of multi-component prevention and alternative strategies to prevent or minimize the use of restraints is growing (Evans et al., 2002). The implementation of alternative strategies (see Appendices J and P) requires safe and least restrictive care environments, early assessment, intervention and individualized plans of care.

An individualized approach to the plan of care is foundational to achieve the goal of restraint prevention. Studies (Amato, Salter, & Mion, 2006; Dean et al., 2007; Donat, 2003; McCue, Urcuyo, Lilu, Tobias, & Chambers, 2004) identify the following multi-component aspects of restraint prevention:

- Support of administration and leadership;
- Review of seclusion/restraint incidents;
- Education of staff, client/family/SDM;
- Consultation with appropriate interprofessional team members;
- Early detection and identification of clients' risks;
- Reinforcement of the client's appropriate responsive behaviours;
- Group programming; and
- Individualized plans of care.

Some different strategies suggested by studies to prevent restraint use are:

Consultation

- **Nurse Practitioners (NP) and Clinical Nurse Specialists (CNS)**
  NP and CNS specialists can be used as resources and role models within organizations to assist nurses through the intricacies of the decision-making process related to restraints (Evans et al., 2002; Möhler et al., 2011). NP/CNS role modeling and consultation with nurses at the point of care can result in the provision of education to identify clients at risk and facilitate the development of good clinical decision-making skills while providing the dissemination of policy and practices that support the use of alternative approaches to the use of restraints in advance or during episodes of escalating client behaviours.

- **Rapid Response or Crisis Response Teams**

  Studies (McCue et al., 2004; Prescott, Madden, Dennis, Tisher, & Wingate, 2007) suggest use of response teams to assist with de-escalation of client responsive behaviours to prevent or minimize the duration of restraint use and consultation for prevention of further restraint episodes. Prescott et al. found in an acute psychiatric care setting that the use of a rapid response team had significant reductions in mechanical restraint use in a six-week intervention period.

Behaviour Management Programs

Systematic behaviour management programs are effective for reducing aggressive behaviours in many clients and the associated risk of restraint use. A study by Dean et al. (2007) demonstrated a decrease in aggressive behaviours and restraint use when staff training, individualized care and management plans, early intervention, reinforcement of appropriate behaviour and the least restrictive form of restraint intervention was used in children and adolescents on a psychiatric unit. McCue et al. (2004) identified that use of stress/anger management groups for clients assisted in reducing aggressive behaviours and the subsequent use of restraints. It is important for nurses to collaborate with the interprofessional team and client when developing and implementing behaviour management programs and to continually evaluate the strategies for effectiveness in reducing responsive behaviours.

Decision-Making Algorithms and Tools

Tools should be used to assist nurses to identify alternative multi-component strategies to siderail use in the provision of care. Appendix Q is an example algorithm that provides strategies that can be considered by the nurse to prevent the use of restrictive siderails. Capezuti et al. (2007) used APNs to evaluate restrictive siderail use in individual residents and conduct facility-wide education in four long term care homes. The findings concluded that restrictive side rail use on residents can be safely reduced without an increase in bed-related falls, recurrent falls or serious injuries (see Recommendation # 2, subsection: Fall Risk/History of Falls) which confirms findings from a earlier study by Capezuti, Maislin, Strumpf, & Evans (2002).

Orientation

Vidan et al. (2009) outlined the following multi-component intervention strategies to manage and/or prevent delirium in seniors with associated agitation that may result in the use of restraints:

- Orientation of all clients;
- Use of clocks and calendars in each room;
- Reminders to clients of time of day, date, place and reason for hospitalization;
- Reminders to wear glasses and hearing aids if applicable;
- Sleep preservation -- hot milk or chamomile tea before sleep; avoid procedures during sleep time;
- Mobilization each day;
- Avoid continuous fluid therapy; and
- Change position every three hours if clients are immobile to prevent skin breakdown and pressure ulcers.

Recreational Activity

Putman & Wang (2007) used a multi-component group of interventions to understand the factors contributing to the resident's agitation and anxiety including the impact of the nursing home environment as it related to the responsive behaviour. Offering resident-driven recreational activities as part of a multi-component group of interventions can decrease agitation and anxiety while increasing socialization resulting in a decrease in restraint use and the use of antipsychotic medication (Putman & Wang).

RECOMMENDATION 7

Nurses in partnership with the interprofessional team should implement de-escalation and crisis management techniques and mobilize the appropriate resources to promote safety and mitigate risk of harm for all in the presence of escalating responsive behaviours.

Level of Evidence = IIb

Discussion of Evidence

Nurses should be aware of environmental factors that can lead to escalating behaviours and increased agitation in clients such as crowding, noise or lack of privacy. Awareness of client-specific triggers or factors that influence the client's behaviour is a prevention strategy and key principle in personalizing a specific de-escalation plan with client identified techniques (see Appendix R). Prevention includes being aware of the early signs of increasing agitation as it applies to the client's pattern of behaviour. Tools (see Appendices S and T) are available to assist the client with the nurse to identify or be aware of early signs of escalating responsive behaviours. Knowledge of early signs of escalating responsive behaviours is an important aspect of prevention, and is important in the consistent implementation of the client's individualized behavioural plan of care by all health-care providers. Specific interventions identified by the client to be effective strategies in the early stages in de-escalating their behaviours may be most effective.

It is essential for nurses to have knowledge of a broad range of de-escalation and behaviour management strategies to ensure effective performance in crisis situations. Appendix U provides some suggestions that can be used by nurses to de-escalate client responsive behaviours and implement client-preferred interventions to assist them to cope. Nurses should have a self-awareness of their abilities in de-escalation and crisis management, trauma informed care, gentle persuasion, and client/family centered care. The nurse should be able to demonstrate competence in the use of therapeutic/interpersonal communication (see Recommendation # 1), including the appropriate use of assessment tools (See Recommendations # 2 and #3) that evaluate client risk to deal with complex situations.

Nurses need to know when to collaborate with interprofessional team members and the organization's leadership about considering any modifications to the environment based on the client's potential for demonstrating responsive behaviours at risk of harm to self/others. Environmental modifications can help decrease the potential for escalating harmful behaviours while providing a safe space for nurses to employ de-escalation strategies to manage the client's escalating behaviours before considering the use of restraints. A study by Beck et al. (2008) investigated the patterns of restraint and seclusion in a psychiatric facility and found that low risk clients (>.15 seclusion or restraint incidents per month over course of hospitalization) were less likely to be the perpetrators of injury or incidents and had different diagnostic and demographic characteristics than high risk clients (>6 incidents in first two months). Beck et al. concluded that new admissions with low risk should be assigned to a less restrictive treatment environment. However, there is limited research and evidence on the effectiveness of various de-escalation and crisis management techniques (Möhler et al., 2011).

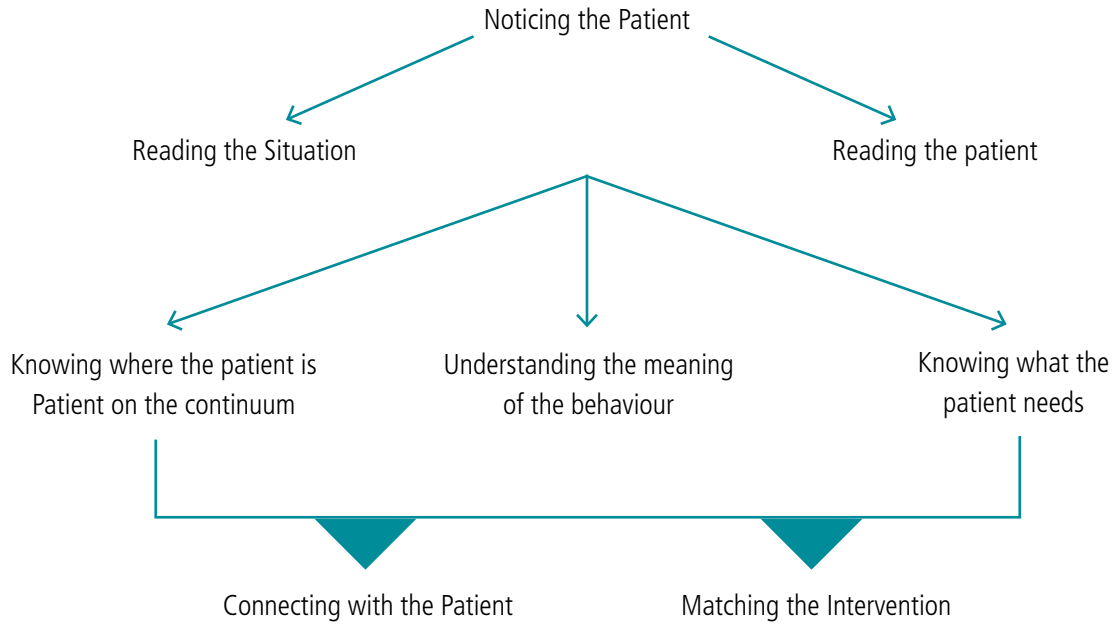
Nurses should consider the physiological and psychological components in de-escalating situations and complete a comprehensive assessment to determine the source of the client's behaviours and try to detect patterns. Physical stress, such as hunger, and pain or physiological stresses, such as infection and delirium are approached differently than agitation from overcrowding, noise, or confusion (NCCNSC, 2005; Park, Hsiao-Chen Tang, & Ledford, 2005). Johnson & Hauser (2001) identify a model for a pattern of action (see Figure 6) for nurses who have the skills to appropriately de-escalate a client's behaviour. This model of action includes the ability to:

- Appropriately observe and understand the needs of the client;
- Take into consideration the environmental factors that may be contributing to the client's behaviours;

- Assess the meaning of the client's demonstrated behaviours; and
- Intervene by employing the most appropriate intervention(s) identified that will hopefully meet the client's needs.

The nurse, with the interprofessional team, should consider their organization's standardized approach to de-escalation and crisis management when creating a client's individual plan of care. Alternative approaches can include providing comfort to the client, providing meaningful activities for the client and providing the client with a safe environment (Snyder, 2004). Treatment approaches for agitated behaviours must be utilized within the context of the situation, the clients' psychopathology, the age of the client, and the degree of anxiety and agitation demonstrated by the client on the continuum of escalating behaviours (from anxiety, agitation to verbal or physical aggression) (Johnson & Hauser, 2001).

Figure 6: Patterns of Action for De-escalating Client Behaviour



Reprinted with permission from Mental Health Nursing.

RECOMMENDATION 8

Nurses in partnership with the interprofessional team should engage in care practices that minimize any risk to the client's safety and well-being throughout the duration of any restraining process.

Level of Evidence = IV

Discussion of Evidence

Restraint-free environments require a philosophy where the first focus of care is predominately on assessment, prevention and use of alternative approaches. The second focus of care is on the implementation of alternative strategies, including use of de-escalation interventions and crisis management techniques; with the use of restraints as a last resort only after all other alternatives have proven ineffective (see Figure 1). Choi and Song (2003) outline that nurses are the primary decision-makers in the use of restraints for client safety. There is insufficient evidence to support the use of restraints including seclusion for short-term management of disturbed/aggressive behaviour in adult psychiatric settings (Mamun & Lim, 2005; McCue et al., 2004; Nelstrop et al., 2006). The literature related to the management of responsive, aggressive or harmful behaviours (Choi & Song; CNO, rev., 2009c; Maccioli et al., 2003; Mamun & Lim; Muralidharan & Fenton, 2008) suggests that if a restraint

(including seclusion) is deemed necessary, the nurse should:

- Review client-specific precipitating and predisposing criteria;
- Identify the client's responsive behaviour;
- Document and initiate strategies that include client preferences for use of alternative approaches and de-escalation strategies to help client with coping;
- Consult with the interprofessional team and client/family/SDM and initiate only after attempts to modify or eliminate the risk factors have not been successful and a restraint is required;
- Initiate a physician's order -- time limited, specific to the type of restraint and product used;
- Advocate for the least restrictive form of restraint and for the earliest trial for the safe removal of the restraint;
- Continue to explore new alternative strategies;
- Review consent with the client/family/SDM;
- Initiate a plan of care in collaboration with the interprofessional team and client/family/SDM;
- Be aware that clients who are not sure why they are being restrained will feel unsafe and ensure the client is given explanations as to their rights, why they are being restrained and what needs to happen (behaviour) in order for them to be removed from the restraints;
- Provide ongoing monitoring as per organization policy that outlines the frequency and type of monitoring required for client safety, the client response to the restraining process, any comfort measures given and the process to explore use of new alternative strategies and trial earliest safe release of the client from restraints;
- Document restraint use and monitoring of the client on a standardized restraint form; and
- Debrief with interprofessional team and client/family/SDM to support:
  - The strengthening or re-establishment of the therapeutic relationship from the client's perspective;
  - A review of the restraint episode from a mitigation of risk perspective. The review should focus on an analysis of the prevention, de-escalation and best practice strategies used prior to the use of restraints, including environment considerations and an evaluation of what did and did not work, with subsequent adjustments to the client's plan of care; and
  - A review of any client complications or safety concerns surrounding the restraining event or as direct result of the use of restraints, as these types of harmful incidents may be prevented with further review, adjustment of policies and procedures and education of staff.

Reduction in the use of physical restraints may result in an increase in use of chemical restraints (Beaulieu et al., 2008). To minimize this possibility, Thapa et al. (2003) does not recommend the use of "as needed" medications as there is a potential for coercive administration resulting in inappropriate use. Overuse of "as needed medications" in clinical practice can result in loss of the client's rights and can have legal implications. There should be a process for the nurse with the interprofessional team to review the use and administration of "as needed" medication to ensure these are not being used as chemical restraint in the clinical setting. Voyer et al. (2005) suggest the use of alternative solutions to reduce unnecessary administration of neuroleptic medications for disruptive behaviours and sleep problems. Sleep disturbances should be assessed and the use of sleep aids and sleep hygiene strategies considered. Alternative strategies such as music (Janelli, Kanski, & Wu, 2002) and aromatherapy (Friedman, Mendelson, Bingham, & Kates, 2009) have been identified as producing a calming effect on unrestrained clients with responsive behaviours. Voyer et al., identified that the use of social (visitation) and physical (restraint use) factors actually escalated responsive behaviours in cognitively impaired clients as a result of violation of their privacy and personal space. Alternative strategies initiated to avoid an increase in the use of chemical restraints should fit with the client's identified preferences.

Nurses must be aware if organizational policies (on what is, or is not a restraint) and procedures (to be followed when a restraint is considered as a last resort) are guided by specific legislation based on health-care sector and client population (see Appendix V, Resource List of Websites) . The CNO, (rev. 2009c) acknowledges that what is considered a restraint may vary depending on the organizational setting (e.g. correctional facilities have clientele that are always restrained by the

environment and paediatric settings have cribs for infants which are not viewed as restraints). The Long-Term Care Homes Act (2007) in Ontario, Canada outlines the Personal Assistance Service Devices (PASD) that are approved for use by the interprofessional team and client/family/SDM and documented in the plan of care can be used for the intended purpose of assisting the client in activities of daily living. The PASD under this definition, by the legislation governing long-term care homes in Ontario, Canada is not considered a restraint if alternatives to the use of the PASD have been considered.

Clients must be monitored frequently by the nurse for the development of complications from restraints (Chaves, Cooper, Collins, Karmarkar, & Cooper, 2007; Maccioli et al., 2003; Mamun & Lim, 2005; Nelstrop et al., 2006). Nurses must have knowledge of the possible multiple medical, psychological and functional complications (see Figure 7) resulting from the use of restraints and be diligent in observation, monitoring and follow up.

Figure 7: Possible Complications of Restraint Use

Medical
• Behaviour alterations ▪ Increased agitation ▪ Increased frustration
• Cardiovascular system alterations ▪ Change in blood pressure, volume and basal metabolic rate ▪ Cardiac stress ▪ Venous stasis (blood clot, pulmonary emboli), lower extremity edema
• Death ▪ Asphyxia ▪ Aspiration ▪ Strangulation
• Decreased functional status ▪ Deconditioning ▪ Increased dependency
• Fecal impaction
• Hydration and nutritional status alterations ▪ Dehydration from lack of access to fluid ▪ Loss of appetite
• Incontinence of urine and stool
• Infection ▪ Nosocomial infections resulting from immobility (e.g. pneumonia)
• Injury ▪ Falls causing injury
• Musculoskeletal alterations ▪ Decrease muscle mass, tone and strength, stiffness ▪ Contractures ▪ Bone demineralization, osteopaenia

Figure 7: Possible Complications of Restraint Use (continued)

- Pain
- Perceptions of Self
  - Loss of autonomy and dignity
  - Changes in self image
  - Guilt
- Psychological
  - Anger
  - Anxiety
  - Depression
  - Fear
  - Sensory deprivation
    - Increased confusion
    - Disordered sleep
  - Trauma/ retraumatization
- Skin integrity alterations
  - Abrasion at restraint site
  - Bruising
  - Development of pressure ulcers

The Patient Restraints Minimization Act (2001) (see Appendix V) was passed in Ontario, Canada to encourage "hospitals and other facilities to use alternative strategies whenever possible when it is necessary to prevent serious bodily harm by a patient to himself/ herself or to others". The Act outlines:

- Definition of alternative method, patient, restrain;
- Authorization requirements to restrain or confine a client or use a monitoring device based on:
  - Enhancement of freedom,
  - Prevention of serious bodily harm (patient/others);
- Consent :
  - Physician order requirements; and
- Organization responsibilities:
  - Establishment of policy and procedures that encourage alternative methods and reporting on compliance to policies,
  - Duty to Monitor:
    - Clients that are restrained, confined or have a monitoring device,
  - Documentation and record keeping,
  - Education of staff.

Nurses must know any restraint legislation based on their jurisdiction and health-care sectors and understand how it applies to their work settings. The CNO (rev. 2009a) identifies that nurses must know their organization's policy and procedures regarding the use of restraints and the informed consent requirements when restraints are considered as an intervention to deal with the client's responsive behaviours. It is very important that nurses use only the type of restraints authorized for use within their organization and know the required monitoring, observation and documentation responsibilities as outlined by their organization's policy and procedures. The Patient Restraints Minimization Act (2001) and the practice standard document on restraints by CNO, (rev. 2009c) outlines that restraints in any form cannot be used except in limited emergency situations where there is risk of harm to self/others, without the client/family/SDM consent. CNO (rev. 2009a; rev.2009c) also outlines that the client/family/SDM have a right to make decisions regarding their care and that the nurse with the interprofessional team must inform the client/family/SDM of any alternative measures/interventions being proposed and the risks and benefits of choices that are available for the client's care and treatment. The Office of the Chief Coroner, Province of Ontario, Canada (2008) recommended that clients should have automatic access to advocacy services whenever they are placed in physical restraint or seclusion or given a chemical restraint. Nurses should be aware of organization policy and processes related to advocacy, client rights and support when restraints are considered as a last resort to ensure clients are informed of options throughout the process.

A range of studies (Akansel, 2007; Forrester, McCabe-Bender, Walsh, & Bell-Bowe, 2000; Kirkevold & Engedal, 2004) continue to cite a lack of nursing documentation regarding the application, care and observation of the client during the restraint process as a challenging issue in practice. Nursing care should include but not be limited to frequent repositioning, passive range of motion and turning, ensuring adequate food and fluid intake, mouth care, toileting/elimination needs, elevation of the head of the bed to 30 degrees unless otherwise indicated, restraint removal and rotation of the affected limb and ambulation as appropriate (Maccioli et al., 2003). Nurses should be supported in the documentation of care for the duration of a client's restraint episode by a standard form (see Appendix W) identified for use within the organization for tracking and recording assessments, observations and the nursing care provided (Choi & Song, 2003).

All orders for restraints should be time limited in duration. The potential to discontinue or reduce restraints should be considered frequently by the health-care team. The process of discontinuing restraints should include a debriefing process with the interprofessional team and the client/family/SDM to ensure that alternatives to restraint use are discussed and to contribute to a plan of care should restraints be indicated again in the future (Wynn, 2004). Appendix X provides an example of a debriefing tool.

Education Recommendations

RECOMMENDATION 9

Education on working with clients at risk for the use of restraints should be included in all entry to practice nursing curricula as well as ongoing professional development opportunities with specific emphasis on:

- Approaches to care: (e.g. trauma informed care);
- Communication and education of client/family/SDM and key components of debriefing;
- Education on nursing responsibilities for the proper application of restraints;
- Ethical decision-making;
- Knowledge of diagnoses and common triggers associated with responsive behaviours putting clients at risk for the use of restraints;
- Interprofessional collaboration;
- Knowledge of basic prevention, alternative approaches, de-escalation and crisis management;
- Monitoring and documentation responsibilities;
- Nurses responsibilities regarding self-reflection and exploring their values and beliefs surrounding the use of restraints and threats to client autonomy and human rights;
- Therapeutic nurse client relationships; client-centred care and client rights;
- Types of restraints (least to most restrictive) and associated safety risks and the potential complications from the use of restraints; and
- Understanding of the legal and legislative requirements governing the use of restraints.

Level of Evidence = Ib

Discussion of Evidence

Education can increase knowledge, change attitudes to reduce the use of physical restraints and be used as a tool to assist nurses in caring for clients with responsive behaviours that put clients at risk for the use of restraints (Evans et al., 2002; Pellfolk et al., 2010; Smith, Timms, Parker, Reimels, & Hamlin, 2003). Education programs have been associated with reductions in the use of restraints in acute care settings (Smith et al., 2003) and in persons with dementia (Pellfolk et al., 2010; Testad, Aasland, & Aarsland, 2005; Testad, Ballard, Bronnick, & Aarsland, 2010). Lee et al. (2001) reviewed training curriculums and suggest that course standardization would assist organizations to train on some of the key elements across programs such as the theoretical aspects of prevention and management of violence and on components that pertain to client safety.

Studies point to the need for education related to the risks of restraint use and use of alternative strategies (Akansel, 2007; Koch, Nay & Wilson, 2006; Kontio et al., 2009; Smith et al., 2003; Sung, Chang, Lee & Lee, 2006; Testad et al., 2010). Educational programs that focus on the myths and facts about restraint use, decision-making processes, alternatives to restraints (physical, environmental, physiological and psychological), the negative impacts of restraint use and alternatives to manage responsive behaviours, show promise in decreasing restraint use, increasing positive client outcomes and greater nurse job satisfaction (Huizing, Hamers, de Jonge, Candel, & Berger, 2007; Huizing, Hamers, Gulpers, & Berger, 2008; Huizing, Hammers, Gulpers, & Berger, 2009; Pellfolk et al., 2010; Smith et al., 2003; Testad et al., 2005).

Studies (Chuang and Huang, 2005; Hamers, Gulpers, & Strik, 2004; Hamers et al., 2009; Huizing et al., 2007; Koch et al., 2006; Kontio et al., 2009; Saarnio, Isola, & Laukkala, 2008; Werner & Mendelsson, 2001) suggest continuing education for nurses should include, but not necessarily be limited, to the following:

- Client autonomy and safety;
- Client case scenarios demonstrating effective interaction with aggressive or psychotic clients;
- Client characteristics for possible risk of the use of restraints including cultural/language influences;
- Client/family/SDM education on alternatives, complications from the use of restraints and expectations for ensuring safety from harm to all;
- Decision-making;
- Definition and understanding of the different forms of restraint;
- Legal, ethical and clinical considerations related to restraint use;
- Myths and misconceptions;
- Opportunity for nurse's self-reflection of their own autonomy, values and beliefs related to human rights;
- Psychological and emotional components including how to cope with feelings regarding the restraint of clients; and
- Use of alternative approaches or modes of action (culturally sensitive) to avoid all forms of restraint.

Nurses should be educated to deal with clients who are exhibiting aggressive behaviour and implement safe, effective alternatives. A deeper understanding of clinical decision-making can also help nurses in implementing policies and safe practices in regards to clients at risk and enable the development of knowledge and skills to serve as role models on an interprofessional team to prevent restraint use (Kontio et al., 2009; Ludwick et al., 2008; Turgay, Sari, & Genc, 2009).

Although there are studies that indicate staff education is effective in reducing restraint use, other studies have noted that education alone is not enough to affect the rate of restraint use (Möhler et al., 2011). Hamers et al. (2009) suggest that a paradigm shift must concurrently occur at the organization level in addition to a staff education program that coincides with the implementation of health-care policies that support the use of alternative approaches. These systems and processes need to be available to staff to support the policy expectations and prevent or reduce the use of restraints.

Organization & Policy Recommendations

RECOMMENDATION 10

Health-care organization should implement risk management and quality improvement strategies to enable a culture that promotes alternative approaches to the use of restraints in support of client rights and staff safety by:

- Establishing a definition of what is a restraint;
- Developing a philosophy that promotes alternative approaches to the use of restraints;
- Establishing a restraint reduction/prevention policy;
- Developing structures that allow for early identification of clients at risk of harm to self/others placing them at risk for the use of restraints;
- Educating the client/family/SDM about the associated risks of restraint use and providing opportunities to explore client/family/SDM concepts of safety;
- Establishing a multi-component program including staff education on alternative strategies to the use of restraints;
- Using alternative approaches, de-escalation and crisis management as the first and second line intervention strategies prior to the use of restraints as a safety measure of last resort;
- Establishing monitoring protocols for clients and the documentation requirements for the duration of any restraining episode;
- Establishing communication responsibilities and debriefing procedures for client/family/SDM and the interprofessional team; and
- Establishing evaluation programs to monitor the rate of restraint use, the uptake of alternative approaches to the use of restraints and the impact on client/family/SDM and interprofessional team safety.

Level of Evidence = Ib

Discussion of Evidence

Definition

Organizations need a clear policy on how to minimize the use of restraints that includes a definition of what is a common understanding of what consitutes a restraint. Lai (2007) identified that if there is no definition of restraint within internal organizational policies, staff experience stress in embracing alternative approaches to the use of restraints and a least restraint philosophy. Koch et al. (2006) found that adopting a universal definition helped alleviate the tension associated with the shift to alternative approaches to the use of restraints within an organization.

Philosophy and Culture

Organizational culture is a key component associated with the reduction in restraint use. Chandler (2008) described the experience of a hospital that was transitioning to a trauma-informed care model. Chandler identified that the key to the transition in this facility was a culture that supported collaborative relationships and a focus on safety. Several studies (Amato et al., 2006; Chandler; Donat, 2003; Pollard, Yanasak, Rogers, & Tapp, 2006; Rask et al., 2007) suggests that administrative support and commitment from senior leadership is important for creating an alternative approach philosophy and culture to prevent the use of restraints.

Early Identification

It is important for organizations to provide support tools and technology to enable early identification of clients at risk for the use of restraints. Organization strategies such as use of algorithms or decision trees can support knowledge translation into clinical practice. The adoption of standardized assessment tools can assist nurses in screening, early identification of clients at risk. This will facilitate the organization's philosophy of care by enabling the development of alternative strategies to manage any emerging client responsive behaviours without the use of restraints (Coussement et al., 2009; Maccioli et al., 2003; McCue et al., 2004).

Multi-component Programs

The implementation of a formal restraint reduction program is important for decreasing restraint use (Hellerstein et al., 2007; Kratz, 2008; Lai et al., 2006; Lebel & Goldstein, 2005; McCue et al., 2004; Pollard et al., 2006). The current research supports that programs to prevent or minimize restraint use must include an interprofessional and consultative approach to planning care (Amato et al., 2006; Baier, Butterfield, Harris, & Gravenstein, 2008; Evans & Fitzgerald, 2002; Lebel & Goldstein; Werner, 2002) and when possible, should consider the use of advanced practice nurses (Capezuti et al., 2007; Ludwick et al., 2008; Vance, 2003; Wagner et al., 2007) and include the establishment of a committee to address the use of restraints (Amato et al.; Gillies et al., 2005). One study supported the need for an interprofessional team approach that includes the client/family/SDM in care and decision-making regarding the use of environmental restraints such as side rails (Gallinagh, Nevin, McAleese, & Campbell, 2001). A key discussion between the interprofessional team and client/family/SDM needs to address information on the potential risks associated with the use of any type of restraint and the possible alternative approach strategies to be considered.

Often family members/SDM and health-care providers think of restraints as providing protection to clients (e.g. prevention of falls or wandering) and therefore are not only supportive but expect that the staff will use restraints to safeguard their family member. The results of education of health-care providers as a strategy to reduce the use of restraints are mixed. There is strong support for education of nurses to increase their knowledge and experience in regard to restraint use while influencing attitudes by learning about client characteristics, the associated risks and use of alternative strategies to prevent the use of restraints (Amato et al., 2006; Dunbar & Neufeld, 2000; Evans & Fitzgerald, 2002; Forrester et al., 2000; Gillies et al., 2005; Lai et al., 2006; McCue et al., 2004; Pellfolk et al., 2010; Smith et al., 2003; Sung et al., 2006; Testad et al., 2005). Other studies have shown no significant effects from education of health-care providers on restraint reduction (Huizing et al., 2007; Huizing et al., 2008; Huizing et al., 2009; Möhler et al., 2011). Studies support education to the client/family/SDM (McCue et al.; Pellfolk et al.). Educating the client/family/SDM will help to build knowledge and trust surrounding the use of alternative approach strategies.

Organizations will need to evaluate all strategies implemented to ensure health-care practices are moving towards the use of alternative approaches with a reduction in the use of restraints, resulting in positive client outcomes. Websites such as TMF (Texas Medical Foundation) Health Quality Institute are available to provide resources such as Organization Commitment to Restraint-Free Environment chart for long-term care to help organizations evaluate their commitment to restraint-free care as well as other resources for comprehensive assessment and evaluation of programs. TMF restraint resources are available at: http://nursinghomes.tmf.org/Restraints/RestraintToolkit/tabid/548/Default.aspx.

Alternative Approaches

Alternative approaches should focus on the client and an individualized approach to care regardless of the client's level of cognition (Happ, 2000). As part of a behaviour management program in a psychiatric hospital, adolescents with their family/SDM collaborated with providers in the development of an individualized management plan that addressed goals of treatment and management of aggression (Dean et al., 2007). Behavioural treatment plans have been successful in decreasing the use of restraints and hours in seclusion in studies (Donat, 2003).

Debriefing

Debriefing with clients/families/SDMs and staff has been helpful in preventing future restraint episodes (Gillies et al., 2005). Studies demonstrate that the application of restraints has negative psychological effects not only on the clients but also the health-care providers who make the decision to apply restraints (Duxbury, 2002; Holmes et al., 2004; Sequeira & Halstead, 2002, 2004). Restraining episodes can be associated with feelings of discomfort, fear and self-blame from the perspective of the client (Wong & Chien, 2005) while the health-care providers feel uncomfortable from the perspective of the client's human rights (Chuang & Huang, 2005; Fonad, Burnard & Emami, 2008; Kontos & Nagilie, 2007; Mayers, Keet, Winkler, & Flisher, 2010).

Studies outline that debriefing post restraint event episodes can assist in dealing with the psychological effects on both client and health-care provider, but also assist in identifying trends and setting targets on the use of restraints to assist in changing the culture around restraint use (Wynn, 2004). Petti, Mohr, Somers, & Sims (2001) identified that debriefing incidents can be used as learning strategies for staff and help staff track the client's progress. Learning from analysis of the event prior to, during and post event assists in changing the culture of psychiatric settings. Part of any organization's quality framework must include an automatic review of each and every restrained client, including environmental restraint and seclusion. This automatic review should include the health-care team and client/family/SDM to review the triggers, the alternatives, the care provided, the strategies and timeframe of the removal of the restraint, the family involvement, and the consent and feedback from the client. Debriefing needs to be implemented within a non-punitive environment and must utilize a standardized approach to assist in the exploration of what events led up to the use of restraints and a review of what went well with an exploration of any harmful incidents to determine what actions could have improved or prevented the outcome. Use of standardized tools or use of technology for assessment and documentation of restraint episodes can assist in debriefing scenarios.

Evaluation and Monitoring

In order to ensure the safety of clients and achieve and maintain restraint minimization within an organization, there must be ongoing data collection, monitoring and evaluation which are part of an overall quality improvement program. Appendix Y provides an example of an audit form. Quality improvement programs should include reviewing rates of restraint use and episodes of challenging restraint events. Post restraint data produced from monitoring should be disseminated and posted on each unit to promote the reduction in the use of restraints (Amato et al. 2006; Castle, 2003).

Several studies have demonstrated that organizations that focused on quality improvement set ambitious targets for restraint reduction and subsequently demonstrate a greater reduction in the use of restraints (Baier et al., 2008; Baier, Butterfield, Patry, Harris, & Gravenstein, 2009; Donat, 2003).

Another important component in monitoring is to review all types of restraint use on an ongoing basis. The frequency of monitoring varies within the literature from daily (McCue et al., 2004) to weekly (Amato et al., 2006; Donat, 2003). Edwards et al. (2006) suggested that the use of observation and chart audits tools are feasible ways to assess restraint use in organizations. Chart audits should review evidence of the client's assessment, exploration of alternatives to restraint use, evidence of consent and the requirements for monitoring when restraints are considered and any education provided to the client/family/SDM with respect to restraints.

RECOMMENDATION 11

The organization's model of care should promote an interprofessional team approach in collaboration with the client and family/SDM that supports the use of alternative approaches and prevents the use of restraints.

Level of Evidence = III

Discussion of Evidence

Organizations should support a model of care that facilitates the use of evidence-based standards of practice and encourages interprofessional team collaboration with the client/family/SDM to identify the most appropriate course of action when the client is at risk for the use of restraints (Yamamoto et al., 2006). Involving the client/family/SDM to guide the interprofessional team in the development of the plan of care is a known predictor of better outcomes and very important in meeting the client's self-defined needs. A model that supports an interprofessional team approach is valuable in the management of clients with behaviours at risk for restraint use (CNO, rev. 2009c; Downes et al., 2009; Fonad et al., 2008; Gallinagh et al. 2001; Werner, 2002).

Models of care should facilitate collaboration, consultation, feedback, mentorship and education among health-care providers in relation to prevention and alternative strategies to the use of restraints (Capezuti et al., 2007; de Veer, Franche, Buijse, & Friele, 2009; Ludwick et al., 2008). Friedman et al. (2009) identified that co-management by geriatricians and orthopaedic surgeons using a standardized approach to care, leads to improved processes and outcomes including a reduction in the use of restraints in clients with hip fractures. Werner (2002) recommended that organizations should consider the role of social workers as mediators and part of the team in the decision-making process regarding the use or removal of physical restraints. Bourbonniere et al. (2003) found that use of part-time, inadequately orientated staff and lack of supporting interprofessional team members influenced hospital care on weekends and resulted in increased use of restraints.

Literature is mixed on the influence of the type of job and ward characteristics (Huizing et al., 2007); staffing levels (Demir, 2007a, 2007b; Donat, 2002; Whitman, Davidson, Rudy, & Sereika, 2001), staff mix (Williams & Myers, 2001); nurse absenteeism and workload (Castle, 2000a, 2000b, 2002; Castle & Banaszak-holl, 2003; Ibe et al., 2008; Unruh, Joseph, & Strickland, 2007) and the nurse's autonomy (Huizing et al., 2007; Lepping et al., 2009; Pekkarinen, Elovainio, Sinervo, Finne-Soveri, & Noro, 2006) on the use of restraints. Affonso, Jeffs, Doran, & Ferguson-Paré (2003) identified workload as a significant issue for nurses in delivering the processes of care in a way that supports client safety. Huizing et al. (2007) review of organizational determinants leading to use of physical restraints did not confirm workload as influencing restraint, but rather client characteristics (e.g. age, impaired cognitive status, and especially impaired mobility) as statistically significant in the use of restraints.

O'Hagan et al. (2008) identifies that reduction of seclusion and restraint tends to be more achievable when staff is involved and there is a focus on education, supervision, performance appraisal and recruitment. O'Hagan et al. suggests that reduction is achievable when there is a high ratio of staff to clients, staffing is stable, mature and well trained. Job descriptions, orientation and performance appraisals should reflect the priority given to reducing seclusion and restraint practices.

Tzeng, Yin, & Grunawalt (2008) outlined the need for further research on the optimum combination of staffing patterns and infrastructure for hospital settings that support safer environments for the interprofessional team, and reduce restraint use. Furthermore, CNO (rev. 2009c) supports the provision of appropriate staffing levels that sustain alternatives to the use of restraints. The Academy of Canadian Executive Nurses believes the issue of nursing workload needs to be addressed to ensure client safety. Nursing leadership, regulatory bodies and literature identify that reasonable workloads sustain quality care and this concept should carry over to restraint use in all health-care settings (Affonso et al., 2003; RNAO, 2007b).

RECOMMENDATION 12

Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as appropriate facilitation. Organizations may wish to develop a plan for implementation that includes:

An assessment of organizational readiness and barriers to education, taking into account local circumstances.

- Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process.
- Ongoing opportunities for discussion and education to reinforce the importance of best practices.
- Dedication of a qualified individual to provide the support needed for the education and implementation process.
- Ongoing opportunities for discussion and education to reinforce the importance of best practices.
- Opportunities for reflection on personal and organizational experience in implementing guidelines.

Level of Evidence = IV

Discussion of Evidence

The Registered Nurses' Association of Ontario (through a panel of nurses, researchers and administrators) has developed the Toolkit: Implementation of Clinical Practice Guidelines (RNAO, 2002), based on available evidence, theoretical perspectives and consensus. The Toolkit is recommended for guiding the implementation of the RNAO best practice guideline Promoting Safety: Alternative Approaches to the Use of Restraints. Successful implementation of the best practice guidelines requires the use of a structured, systematic planning process and strong leadership from nurses who are able to transform the evidence-based recommendations into policies and procedures that impact on practice within the organization. The RNAO Toolkit (2002) provides a structured model for implementing practice change. Please refer to Appendix D for a description of the Toolkit.

Research Gaps and Future Implications

The expert development panel, in reviewing the evidence for this guideline, has identified several gaps in the research literature related to client safety, alternative approaches to the use of restraints and restraint use. In considering these gaps, the panel has identified the following priority research areas:

- The development of valid tools that identify risk factors in clients at risk for restraint use in all health-care sectors/specialties;
- The impact of the therapeutic relationship on the client in relation to preventing or reducing the use of restraints;
- The impact of diversity, including culture and language, on the use of restraints;
- The model of care that promotes the best support for implementation of alternative approaches to the use of restraints;
- Large multi-site randomized control trials to identify nursing-specific interventions that focus on identifying the most effective alternative approaches to the use of restraints;
- Exploration of the ethical dilemmas involved in nursing care while balancing client safety and quality of life;
- Identification of factors known to influence nurses in the decision to use restraints (e.g. workload, staffing patterns);
- The impact of ongoing nursing professional development on restraint risk reduction and prevention;
- The most effective strategies for knowledge translation in nursing clinical practice for the uptake of evidence-based practices for restraint risk reduction and prevention;
- The identification of factors (e.g. structures, processes, philosophy and culture) in health-care settings that contribute to an alternative approach to use of restraint and safe restraint use practice environments;
- The identification of the extent to which restraints are being used in specialty settings such as intensive care, paediatric and home health-care settings, and to explore and identify the most effective alternative approaches/strategies for these settings specific to the client populations;
- The best monitoring and safety practices during the restraining process;
- The development of best tools and technologies to assist health-care providers and organizations to achieve restraint-free environments;
- The optimal approach to review disputes on the inappropriate use of restraints; research should focus on how to create a safe environment within organizations for staff and clients/family/SDM to report on possible inappropriate restraint use;
- The development of tools or strategies to assist in the safe weaning of restraints once applied;
- The impact of this guideline on prevention and reduction of restraint use;
- The impact of health policy in ensuring restraint-free health-care environments.

The above list is an attempt to identify and prioritize some of the research gaps, although it in no way exhausts the opportunities for further research in this area of study.

Evaluation/Monitoring of Guideline

Organizations implementing the recommendations in this nursing best practice guideline are advised to consider how the implementation, and its impact, will be monitored and evaluated. The following table, based on a framework outlined in the RNAO *Toolkit: Implementation of Clinical Practice Guidelines (2002)*, illustrates some specific indicator for monitoring and evaluation of the guideline: ***Promoting Safety: Alternative Approaches to the Use of Restraints.***

Level of Indicator	Structure	Process	Outcome
	To evaluate the supports available in the organization that facilitate nurses using alternative approaches to restraints.	**To evaluate changes in practice that lead towards prevention and use of alternative practices.**	**To evaluate the impact of recommendations to ensure client safety and movement toward an environment that prevents the use of restraints.**
System	A structure is created to develop a universal definition of restraint and mechanisms are in place for adoption across all healthcare system settings.	A review process is in place to facilitate the review of the organization's policy and procedures to include the universal definition of restraint.	Universal definition of restraint across all healthcare system settings.
	Academic settings with nursing programs have a structure in place to facilitate embedding theory and best practices regarding alternative approaches, prevention, de-escalation/crisis management and least restraint practices for client safety into curricula.	A review process is in place to ensure nursing core curricula is updated with current theory and best practices regarding alternative approaches, prevention, de-escalation/crisis management and least restraint practices for client safety.	Nursing students demonstrate awareness and use of current evidence-based theory and best practices regarding alternative approaches, prevention, de-escalation/ crisis management and least restraint practices for client safety from their nursing program learnings.
	A mechanism is established that allows for the joint review by schools of nursing and healthcare organizations of theoretical and best practices related to prevention, alternative approaches, de-escalation and crisis management and least restraint use that are effective in the clinical settings.	A process is in place that facilitates dialogue between schools of nursing and health-care organizations to review current theory and best practices known to be effective in clinical settings.	Nursing Programs integrate current theory and best practice recommendations from healthcare organizations that are known to be effective in clinical settings.

Level of Indicator	Structure	Process	Outcome
Organization	Organizations have a structure in place to review best practice guideline recommendations.	A process is in place that allows the review of organization policies and procedures to ensure they align with the best practice guideline recommendations that are based on current theory and research regarding alternative approaches, prevention, de-escalation/crisis management and least restraint practices.	Policy and procedures are consistent with the best practice guideline recommendations for use of alternative approaches, prevention, de-escalation/crisis management and least restraint practices.
	A structure is in place that allows for quality review of client outcomes related to the implementation of the organization policy based on the best practice recommendations regarding prevention, alternative approaches, de-escalation/crisis management and least restraint practices.	A standardized process (e.g. evaluation tools and data collection procedures) is in place within the organization to facilitate the collection of outcome data regarding the implementation of a policy based on the best practice recommendations regarding prevention, alternative approaches, de-escalation/crisis management and least restraint practices.	Quality improvement evaluation processes are in place to monitor outcomes of policy and practice implementation that support prevention, alternative approaches, de-escalation/crisis management and least restraint practices as evidenced by: • A decrease in the rate of restraint use; • Type of restraints used; • A decrease in the duration of restraint episodes; • An increase in use of alternative strategies used prior to least restraint use; • Improved documentation practices showing an increase in: ▪ Assessment of predisposing/precipitating factors; ▪ Individualized plan of care with client preferred alternative approach strategies incorporated; ▪ Education to client/family/SDM regarding policy/practices to do with restraints; ▪ Use of alternative strategies prior to restraint use;

Level of Indicator	Structure	Process	Outcome
			▪ Consent for restraint use: • client/family/SDM, • physician orders; ▪ Use of observation and monitoring protocols; • An increase in post incident follow up demonstrating debriefing review with client/family/SDM and staff; • An increase in the client/family/SDM satisfaction; or • A decrease in complications following least restraint episodes.
Nurse	A mechanism is in place to ensure nurse education on the organization policy regarding prevention, alternative approaches, de-escalation/crisis management and least restraint.	A process is in place to facilitate nurses attendance at educational sessions regarding prevention, alternative approaches, de-escalation/crisis management and least restraint practices as evidenced by: • An increase in the number of nurses who attend education sessions; • Nursing documentation reflects best practices in regards to use of alternative approaches and restraint practices.	Nurses display an increased ability to execute prevention, alternative approaches to the use of restraints with restraint use as a last resort, evidenced by: • A decrease in the prevalence of restraint/seclusion use; • An increase in use of alternative approaches, de-escalation and crisis management strategies; or • A decrease in complications from least restraint use.
Client	Mechanisms are in place to ensure client education on the organization's policy and practices surrounding prevention, alternative approaches, de-escalation/crisis management and least restraint practices.		

Level of Indicator	Structure	Process	Outcome
	The model of care facilitates the clients/family/SDM as active participants in the assessment and development of the plan of care to ensure the client specific alternative approach strategies are in place to prevent the use of restraints.		
		Processes are in place within the organization setting that facilitates the client's involvement in the: • Assessment and identification of risks; • Identification of known successful alternative approaches to be incorporated into care planning to prevent the use of restraints; • Consent and preferred method of least restraint use only as a last resort; and • Initial and ongoing education on organization policy and practices for prevention, use of alternative approaches, least restraint use and monitoring/observation routines.	Client/family/SDM demonstrate an increased: • Awareness and knowledge of policy and practice surrounding prevention, restraint use risks, alternative strategies, and safe restraint practices; • Knowledge of precipitating and predisposing factors; and • Ability to articulate alternative strategies known to prevent or limit escalating responsive behaviours. Reports indicate an increase in client/family/SDM satisfaction surrounding the use of alternative strategies or least restraint.
Financial Costs	A structure is in place within organizations to review financial impact of a policy that promotes best practices to prevention, use alternative approaches, de-escalation/ crisis management and least restraint practices.	A process is in place to determine financial requirements annually to support a policy that promotes best practices to prevent, use alternative approaches, de-escalation/crisis management and least restraint practices.	Annual budget in place to cover the financial costs for supporting policy and practice.

Implementation Strategies

The Registered Nurses' Association of Ontario (RNAO) and the guideline development panel have compiled a list of implementation strategies to assist health-care organizations or health-care disciplines that are interested in implementing this guideline. A summary of these strategies follows:

- Executive Senior Leadership should view the establishment of a culture that supports alternative approaches to prevent the use of restraints as an organizational priority.
- Have at least one dedicated individual, such as an advanced practice nurse or a clinical resource nurse, who will provide support, clinical expertise and leadership. The individual should also have good interpersonal, facilitation and project management skills.
- Conduct an organizational needs-assessment related to *Promoting Safety: Alternative Approaches to the Use of Restraints* to identify current knowledge base and further educational requirements.
- Initial needs assessment may include an analysis approach, survey and questionnaire, group format approaches (e.g. focus groups) and critical incidents.
- Establish a steering committee comprised of key stakeholders, interprofessional members with client/family/SDM member representation committed to lead the change initiative. Identify short-term and long-term goals. Keep a work plan to track activities, responsibilities and timelines.
- Create a vision to help direct the change effort and develop strategies for achieving and sustaining the vision.
- Program design should include:
  - Target population;
  - Goals and objectives;
  - Outcome measures;
  - Required resources (human resources, facilities, equipment); and
  - Evaluation activities.
- Design educational sessions and ongoing support for implementation. The education sessions may consist of presentations, facilitator's guide, handouts, and case studies. Binders, posters and pocket cards may be used as ongoing reminders of the training. Plan education sessions that are interactive, include problem-solving, address issues of immediate concern and offer opportunities to practice new skills (Davies & Edwards, 2004).
- Provide organizational support such as having the structures in place to facilitate the implementation. For example, hiring replacement staff so participants will not be distracted by concerns about work and having an organizational philosophy that reflects the value of best practices through policies and procedures. Develop new assessment and documentation tools (Davies & Edwards, 2004).
- Identify and support designated best practice champions on each unit to promote and support implementation. Celebrate milestones and achievements, acknowledging work well done (Davies & Edwards, 2004).
- Organizations implementing this guideline should adopt a range of self-learning, group learning, mentorship and reinforcement strategies that will, over time, build the knowledge and confidence of nurses in implementing this guideline.
- Beyond skilled nurses, the infrastructure required to implement this guideline includes access to specialized equipment (alternative approach and restraints materials). Orientation of the staff to the use of specific products and technologies must be provided and regular refresher training planned.
- Teamwork, collaborative assessment and treatment planning with the client/family/SDM and interprofessional team are beneficial in implementing guidelines successfully. Referral should be made as necessary to services or resources in the community or within the organization.

In addition to the strategies mentioned above, the RNAO has developed resources that are available on the website. A Toolkit for implementing guidelines can be helpful if used appropriately. A brief description about this toolkit can be found in Appendix D. A full version of the document in PDF format is also available at the RNAO website, www.rnao.org/bestpractices.

Process For Update / Review Guideline

The Registered Nurses' Association of Ontario proposes to update this best practice guideline as follows:

1. Each nursing best practice guideline will be reviewed by a team of specialists (Review Team) in the topic area, to be completed every three to five years following the last set of revisions.
2. During the period between development and revision, RNAO program staff will regularly monitor for new systematic reviews, randomized controlled trials and other relevant literature in the field.
3. Based on the results of the monitor, program staff may recommend an earlier revision plan. Appropriate consultation with a team of members composed of original panel members and other specialists in the field will help inform the decision to review and revise the guideline earlier than the targeted milestone.
4. Three months prior to the review milestone, the program staff will commence the planning of the review process by:
    a) Inviting specialists in the field to participate in the Review Team. The Review Team will be comprised of members from the original panel as well as other recommended specialists.
    b) Compiling feedback received, questions encountered during the dissemination phase, as well as other comments and experiences of implementation site representatives regarding their experiences.
    c) Compiling new clinical practice guidelines in the field, systematic reviews, meta-analysis papers, technical reviews, randomized controlled trial research and other relevant literature.
    d) Developing a detailed work plan with target dates and deliverables.
5. The revised guideline will undergo dissemination based on established structures and processes.

Reference List

Affonso, D.D., Jeffs, L., Doran, D. & Ferguson-Paré, M. (2003). Patient safety to frame and reconcile nursing issues. *Canadian Journal of Nursing Leadership 16*(4), 69-81.

Akansel, N. (2007). Physical restraint practices among ICU nurses in one university hospital in western Turkey. *Health Science Journal, 1(4),* 7- 13.

Amato, S., Salter, J. P., & Mion, L. C. (2006). Physical restraint reduction in the acute rehabilitation setting: A quality improvement study. *Rehabilitation Nursing, 31*(6), 235-241.

Alzheimer Society. (2011) The Alzheimer Care: Ethical Guidelines, Restraints. (2011). Retrieved from http://www.alzheimer.ca/english/care/ethics-restraints.htm

Baier, R. R., Butterfield, K., Harris, Y., & Gravenstein, S. (2008). Aiming for star performance: The relationship between setting targets and improved nursing home quality of care. *Journal of the American Medical Directors Association, 9* (8), 594-598.

Baier, R. R., Butterfield, K., Patry, G., Harris, Y., & Gravenstein, S. (2009). Identifying star performers: The relationship between ambitious targets and nursing home quality improvement. *Journal of the American Geriatrics Society, 57*(8), 1498-1503.

Baker, C., Ogden, S., Prapaipanich, W., Keith, C. K., Beattie, L. C., & Nickleson, L. (1999). Hospital consolidation: Applying stakeholder analysis to merger lifecycle. *Journal of Nursing Administration, 29*(3), 11-20.

Beaulieu, C., Wertheimer, J. C., Pickett, L., Spierre, L., Schnorbus, T., Healy, W.,… Jones, A. (2008). Behavior management on an acute brain injury unit: Evaluating the effectiveness of an interdisciplinary training program. *Journal of Head Trauma Rehabilitation, 23*(5), 304-311.

Beck, N. C., Durrett, C., Stinson, J., Coleman, J., Stuve, P., & Menditto, A. (2008). Trajectories of seclusion and restraint use at a state psychiatric hospital. *Psychiatric Services, 59*(9), 1027-1032.

Becker, C., Loy, S., Sander, S., Nikolaus, T., Rissmann, U., & Kron, M. (2005). An algorithm to screen long-term care residents at risk for accidental falls. *Aging-Clinical & Experimental Research, 17*(3), 186-192.

Bennet, J. (2008). Confronting the risk of elopement. *Nursing Homes, 57*(1), 54.

Bigwood, S. & Crowe, M. (2008). 'It's part of the job, but it spoils the job': A phenomenological study of physical restraint. *International Journal of Mental Health Nursing, 17*(3), 215-222.

Black, N., Murphy, M., Lamping, D., McKee, M., Sanderson, C., Askham, J., & Marteau, T. (1999). Consensus development methods: Review of best practice in creating clinical guidelines. *Journal of Health Services Research & Policy, 4*(4), 236-248.

Bonner, G., Lowe, T., Rawcliffe, D., & Wellman, N. (2002). Trauma for all: A pilot study of the subjective experience of physical restraint for mental health inpatients and staff in the UK. *Journal of Psychiatric & Mental Health Nursing, 9*(4), 465-473.

Bourbonniere, M., Strumpf, N. E., Evans, L. K., & Maislin, G. (2003). Organizational characteristics and restraint use for hospitalized nursing home residents. *Journal of the American Geriatrics Society, 51*(8), 1079-1084.

Brouwers, M., Kho, M. E., Browman, G. P., Burgers, J. S., Cluzeau, F., Feder. G., … Zitzelsberger, L., for the AGREE Next Steps Consortium (2010). *AGREE* II: Advancing guideline development, reporting and evaluation in healthcare. *Canadian Medical Association Journa*l. Retrieved from http://www.agreetrust.org/resource-centre/agree-ii/. Doi:10.1503/cmaj.090449

Canadian Coalition for Seniors Mental Health (CCSMH). (2006). *National guidelines for senior's mental health: The assessment and treatment of mental health issues in Long Term Care homes (focus on mood and behaviour symptoms)*. Toronto, ON: Canadian Coalition for Seniors' Mental Health. Retrieved from http://www.ccsmh.ca/en/projects/ltc.cfm

Canadian Health Services Research Foundation (2006). *Conceptualizing and combining evidence.* Retrieved from www.chsrf.ca/other_documents/evidence_e.php#definition.

Canadian Patient Safety Institute (CPSI). (2003). Canadian Patient Safety Dictionary. Retrieved from

http://rcpsc.medical.org/publications/PatientSafetyDictionary_e.pdf

Capezuti, E., Maislin, G., Strumpf, N., & Evans, L. K. (2002). Side rail use and bed-related fall outcomes among nursing home residents. *Journal of the American Geriatrics Society, 50*(1), 90-96.

Capezuti, E., Wagner, L. M., Brush, B. L., Boltz, M., Renz, S., & Talerico, K. A. (2007). Consequences of an intervention to reduce restrictive side rail use in nursing homes. *Journal of the American Geriatrics Society, 55*(3), 334-341.

Castle, N. G. (2000a). Differences in nursing homes with increasing and decreasing use of physical restraints. *Medical Care, 38*(2), 1154-1163.

Castle, N. G. (2000b). Deficiency citations for physical restraint use in nursing homes. *Journals of Gerontology Series B-Psychological Sciences & Social Sciences, 55*(1), S33-S40.

Castle, N. G. (2002). Nursing homes with persistent deficiency citations for physical restraint use. *Medical Care, 40*(10), 868-878.

Castle, N. G. (2003). Providing outcomes information to nursing homes: Can it improve quality of care? *Gerontologist, 43*(4), 483-492.

Castle, N. G. & Banaszak-Holl, J. (2003). The effect of administrative resources on care in nursing homes. *Journal of Applied Gerontology, 22*(3), 405-424.

Chandler, G. (2008). From traditional inpatient to trauma-informed treatment: Transferring control from staff to patient. *Journal of the American Psychiatric Nurses Association, 14*(5), 363-371.

Chaves, E. S., Cooper, R. A., Collins, D. M., Karmarkar, A., & Cooper, R. (2007). Review of the use of physical restraints and lap belts with wheelchair users. *Assistive Technology, 19*(2), 94-107.

Cohen-Mansfield, J. (1989). *Cohen Mansfield Agitation Inventory (CMAI)*. Research Institute of the Hebrew Home of Greater Washington. Retrieved from http://www.dementia-assessment.com.au/symptoms/CMAI_Scale.pdf

Choi, E. & Song, M. (2003). Physical restraint use in a Korean ICU. *Journal of Clinical Nursing, 12*(5), 651-659.

Chuang, Y. H. & Huang, H. T. (2005). Nurses' feelings and thoughts about using physical restraints on hospitalized older patients. *Journal of Clinical Nursing, 16*(3), 486-494.

College of Nurses of Ontario (CNO). (rev. 2008). *Documentation Standard*. Toronto: College of Nurses. Retrieved from http://www.cno.org/Global/docs/prac/41001_documentation.pdf

College of Nurses of Ontario (CNO). (rev. 2009a). *Consent Standard*. Toronto: College of Nurses. Retrieved from http://www.cno.org/Global/docs/policy/41020_consent.pdf

College of Nurses of Ontario (CNO). (rev. 2009b). *Ethics Standard*. Toronto: College of Nurses. Retrieved from http://www.cno.org/Global/docs/prac/41034_Ethics.pdf

College of Nurses of Ontario (CNO). (rev. 2009c). *Restraints Standard, Revised*. Toronto: College of Nurses. Retrieved from http://www.cno.org/Global/docs/prac/41043_Restraints.pdf.

College of Nurses of Ontario (CNO). (2009d). *Therapeutic nurse-client relationship*. *Revised 2006*. Toronto: College of Nurses. Retrieved from http://www.cno.org/Global/docs/prac/41033_Therapeutic.pdf.

Coussement, J., Dejaeger, E., Lambert, M., Van Den Noortgate, N., De, P. L., Boonen, S.,... Milisen, K. (2009). Translating fall incidence data into fall-preventive measures in geriatric wards–A survey in Belgian hospitals. *Gerontology, 55*(4), 398-404.

Crock, C., Olsson, C., Phillips, R., Chalkiadis, G., Sawyer, S., Ashley, D.,…Monagle, P. (2003). General anaesthesia or conscious sedation for painful procedures in childhood cancer: The family's perspective. *Archives of Disease in Childhood, 88,* 253-257.

Davies, B. & Edwards, N. (2004). RNs measure effectiveness of best practice guidelines. *Registered Nurse Journal*, 16(1), 21-23.

Dean, A. J., Duke, S. G., George, M., & Scott, J. (2007). Behavioral management leads to reduction in aggression in a child and adolescent psychiatric inpatient unit. *Journal of the American Academy of Child and Adolescent Psychiatry, 46*(6), 711-720.

Delaney, K. R. & Fogg, L. (2005). Patient characteristics and setting variables related to use of restraint on four inpatient psychiatric units for youths. *Psychiatric Services, 56*(2), 186-192.

de Jonghe-Rouleau, A. P., Pot, A. M., & de Jonghe, J. F. (2005). Self-injurious behaviour in nursing home residents with dementia. *International Journal of Geriatric Psychiatry, 20*(7), 651-657.

Demir, A. (2007a). Nurses' use of physical restraints in four Turkish hospitals. *Journal of Nursing Scholarship, 39*(1), 38-45.

Demir, A. (2007b). The use of physical restraints on children: Practices and attitudes of paediatric nurses in Turkey. *International Nursing Review, 54*(4), 367-374.

de Veer, A. J., Francke, A. L., Buijse, R., & Friele, R. D. (2009). The use of physical restraints in home care in the Netherlands. *Journal of the American Geriatrics Society, 57,* 1881-1886.

Dickson, B. C. & Pollanen, M. S. (2009). Case report: Fatal thromboembolic disease: A risk in physically restrained psychiatric patients. *Journal of Forensic and Legal Medicine, 16*(5), 284-286.

Donat, D. C. (2002). Impact of improved staffing on seclusion/restraint reliance in a public psychiatric hospital. *Psychiatric Rehabilitation Journal, 25*(4), 413-416.

Donat, D.C. (2003). An analysis of successful efforts to reduce the use of seclusion and restraint at a public psychiatric hospital. *Psychiatric Services*, *54*(8), 1119-1123.

Downes, M. A., Healy, P., Page, C. B., Bryant, J. L., & Isbister, G. K. (2009). Structured team approach to the agitated patient in the emergency department. *Emergency Medicine Australasia, 21*(3), 196-202.

Dumais, A., Larue, C., Drapeau, A., Menard, G., & Giguere Allard, M. (2010). Prevalence and correlates of seclusion with or without restraint in a Canadian psychiatric hospital: A 2-year retrospective audit. *Journal of Psychiatric and Mental Health Nursing*. *18*. DOI: 10.1111/j.1365-2850.2010.01679.x

Dunbar, J. & Neufeld, R. R. (2000). Partnership beyond restraints: A state wide educational intervention to reduce restraint use. *Annals of Long-Term Care, 8*(24), 47-54.

Dunn, K.S. (2001). The effect of physical restraints on fall rates in older adults who are institutionalized. *Journal of Gerontological Nursing*, *27*(10), 40-48.

Duxbury, J. (2002). An evaluation of staff and patient views of and strategies employed to manage inpatient aggression and violence on one mental health unit: A pluralistic design. *Journal of Psychiatric & Mental Health Nursing, 9*(3), 325-337.

Edwards, N., Danseco, E., Heslin, K., Ploeg, J., Santos, J., Stansfield, M., & Davies, B. (2006). Development and testing of tools to assess physical restraint use. *Worldviews on Evidence-Based Nursing, 3*(2), 73-85.

Engberg, J., Nicholas, G., Castle, N. G., & McCaffrey, D. (2008). Physical restraint initiation in nursing homes and subsequent resident health. *Gerontologist, 48*(4), 442-452.

Evans, D. & Fitzgerald, M. (2002). The experience of physical restraint: A systematic review of qualitative research. *Contemporary Nurse, 13*(1), 126-135.

Evans, D., Wood, J., & Lambert, L. (2002). A review of physical restraint minimization in the acute and residential care settings. *Journal of Advanced Nursing, 40*(6), 616-625.

Feng, Z., Hirdes, J. P., Smith, T. F., Finne-Soveri, H., Chi, I., Du, P. J. N.,… Mor, V. (2009). Use of physical restraints and antipsychotic medications in nursing homes: A cross-national study. *International Journal of Geriatric Psychiatry, 24*(10), 1110-1118.

Field, M. J. & Lohr, K. N. (1990). *Guidelines for clinical practice: Directions for a new program.* Washington, D.C.: Institute of Medicine, National Academy Press.

Flannery, J., Rachlin, S., & Walker, A. P. (2002). Characteristics of assaultive patients with schizophrenia versus

personality disorder: Six year analysis of the Assaulted Staff Action Program (ASAP). *Journal of Forensic Sciences, 47*(3), 558-561.

Fonad, E., Burnard, P., & Emami, A. (2008). Shielding or caging? Healthcare staffs' views on fall risk and protection in Stockholm. *International Journal of Older People Nursing, 3*(1), 46-54.

Forrester, D. A., McCabe-Bender, J., Walsh, N., & Bell-Bowe, J. (2000). Physical restraint management of hospitalized adults and follow-up study. *Journal for Nurses in Staff Development-JNSD, 16*(6), 267-276.

Fricke, J. (2011). Activities of Daily Living. In: J.H. Stone, M. Blouin, (eds). International Encyclopedia of Rehabilitation. Retrieved from http://cirrie.buffalo.edu/encyclopedia/en/article/37/

Friedman, S. M., Mendelson, D. A., Bingham, K. W., & Kates, S. L. (2009). Impact of a co-managed Geriatric Fracture Center on short-term hip fracture outcomes. *Archives of Internal Medicine, 169*(18), 1712-1717.

Futrell, M., Melillo, K. D., & Remington, R. (2008). *Evidence-based practice guideline. Wandering*. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Translation Dissemination Core.

Gallinagh, R., Nevin, R., McAleese, L., & Campbell, L. (2001). Perceptions of older people who have experienced physical restraint. *British Journal of Nursing, 10*(13), 852-859.

Gillies, J., Moriarty, H., Short, T., Pesnell, P., Fox, C., & Cooney, A. (2005). An innovative model for restraint use at the Philadelphia Veterans Affairs Medical Center. *Nursing Administration Quarterly, 29*(1), 45-56.

Hamers, J. P., Gulpers, M. J., & Strik, W. (2004). Use of physical restraints with cognitively impaired nursing home residents. *Journal of Advanced Nursing, 45*(3), 246-251.

Hamers, J. P., Meyer, G., Kopke, S., Lindenmann, R., Groven, R., & Huizing, A. R. (2009). Attitudes of Dutch, German and Swiss nursing staff towards physical restraint use in nursing home residents, a cross-sectional study. *International Journal of Nursing Studies, 46*(2), 248-255.

Happ, M. B. (2000). Using a best practice approach to prevent treatment interference in critical care. [Review]. *Progress in Cardiovascular Nursing, 15*(2), 58-62.

Health Canada (2006). *Advance care planning: The Glossary Project: Final report.* [Online]. Retrieved from http://www.hc-sc.gc.ca/hcs-sss/pubs/palliat/2006-proj-glos/index-eng.php.

Hellerstein, D. J., Staub, A. B., & Lequesne, E. (2007). Decreasing the use of restraint and seclusion among psychiatric inpatients. *Journal of Psychiatric Practice, 13*(5), 308-317.

Higgins, J. P. T. & Green, S. (Eds.). (2008). *Cochrane Handbook for Systematic Reviews of Interventions Version 5.0.1.* Retrieved from www.cochrane-handbook.org

Holmes, D., Kennedy, S. L., & Perron, A. (2004). The mentally ill and social exclusion: A critical examination of the use of seclusion from the patient's perspective. *Issues in Mental Health Nursing, 25*(6), 559-578.

Hospital Bed Safety Group. (2003). Clinical guidance for the assessment and implementation of bedrails in hospitals, long- term care facilities, and home care settings. US Department of Health and Human Services. Retrieved from http://www.fda.gov/medicaldevices/productsandmedicalprocedures/generalhospitaldevicesandsupplies/hospitalbeds/default.htm

Huizing, A. R., Hamers, J. P., deJonge, J., Candel, M., & Berger, M. P. (2007). Organizational determinants of the use of physical restraints: A multilevel approach. *Social Science & Medicine, 65*(5), 924-933.

Huizing, A. R., Hamers, J. P. H., Gulpers, M. J. M., & Berger, M.P.F. (2008). Preventing the use of physical restraints on residents newly admitted to psycho-geriatric nursing home wards: A cluster-randomized trial. *BioMed Central Geriatrics*, *6*(17), 459-469. Doi:10.1186/1471-2318-6-17. Retrieved from http://www.biomedcentral.com/1471-2318/6/17

Huizing, A., Hammers, J., Gulpers, M., & Berger, M. (2009). A cluster randomized trial of educational interventions to decrease the use of physical restraints with psycho-geriatric nursing home residents. *Journal of American Geriatrics Society, 57*(7), 1139-1148.

Huckshorn, K. A. (2004). Reducing seclusion and restraint in mental health settings: Core strategies for prevention. *Journal of Psychosocial Nursing and Mental Health Services*, *42*(9), .22-33.

Ibe, T., Ishizaki, T., Oku, H., Ota, K., Takabatake, Y., Iseda, A.,… Ueda, A. (2008). Predictors of pressure ulcer and physical restraint prevalence in Japanese acute care units. *Japan Journal of Nursing Science, 5*(2), 91-98.

Institute for Clinical Systems Improvement (ICSI) (2008). *Prevention of falls (acute care). Health care protocol*. Bloomington (MN): Institute for Clinical Systems Improvement.

Interprofessional Care Steering Committee. (2007). *Interprofessional Care: A blueprint for action in Ontario*. Retrieved from http://www.healthforceontario.ca/upload/en/whatishfo/ipc%20blueprint%20final.pdf

Janelli, L.M., Kanski, G. W., & Wu, Y. B. (2002). Individualized music – A different approach to the restraint issue. *Rehabilitation Nursing, 27*(6), 221-226.

Johnson, M. E. & Hauser, P. M. (2001). The practices of expert psychiatric nurses: Accompanying the patient to a calmer personal space. *Issues in Mental Health Nursing, 22*(7), 651-668.

Johnson, S., Ostaszkiewics, J., & O'Connell, B. (2009). Moving beyond resistance to restraint minimization: A case study of change management in aged care. *Worldviews on Evidence-Based Nursing, 6*(4), 210-218.

Kaltiala-Heino, R., Tuohimaki, C., Korkeila, J., & Lehtinen, V. (2003). Reasons for using seclusion and restraint in psychiatric inpatient care. *International Journal of Law and Psychiatry, 26*(2), 139-149.

Karlsson, S., Bucht, G., Eriksson, S., & Sandman, P. O. (2001). Factors relating to the use of physical restraints in geriatric care settings. *Journal of the American Geriatrics Society, 49*(12), 1722-1728.

Kirkevold, O. & Engedal, K. (2004). A study into the use of restraint in nursing homes in Norway. *British Journal of Nursing, 13*(15), 902-905.

Kitwood, T. (1997). *Dementia reconsidered: The person comes first.* Open University Press, Buckingham.

Koch, S., Nay, R., & Wilson, J. (2006). Restraint removal: Tension between protective custody and human rights. *International Journal of Older People Nursing, 1*(3), 151-158.

Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (2000). To err is human: Building a safer healthcare system. Washington, DC: National Academy Press, 2000.

Kontos, P. C. & Naglie, G. (2007). Bridging theory and practice: Imagination, the body, and person-centred dementia care. *Dementia November, 6*(4), 549-569. Doi: 10.1177/1471301207084394

Kontio, R., Valimaki, M., Putkonen, H., Cocoman, A., Turpeinen, S., Kuosmanen, L., & Joffe, G. (2009). Nurses' and physicians' educational needs in seclusion and restraint practices. *Perspectives in Psychiatric Care, 45*(3), 198-207

Kotynia-English, R., McGowan, H., & Almeida, O. P. (2005). A randomized trial of early psychiatric intervention in residential care: Impact on health outcomes. *International Psychogeriatrics, 17*(3), 475-485.

Kratz, A. (2008). Use of the acute confusion protocol: A research utilization project. *Journal of Nursing Care Quality, 23*(4), 331-337.

Lai, C. K. Y. (2007). Nurses using physical restraints: Are the accused also the victims? A study using focus group interviews. *BioMed Central Nursing, 6*(5), 1-7.

Lai, C. K. Y., Chan, M. H., Szeto, S. S. L., Law, A. K. Y., Cheng, Y., Chan, T. M. F., & Leung, V. W. M. (2006). A retrospective study on the outcomes of a collaborative restraint reduction project by a residential home for older people and a hospital-based community geriatric assessment service. *Hong Kong Nursing Journal, 42*(1), 23-31.

Lebel, J. & Goldstein, R. (2005). The economic cost of using restraint and the value added by restraint reduction or elimination. *Psychiatric Services, 56*(9), 1109-1114.

Lee, J. S., Hui, E., Chan, F., Chi, I., & Woo, J. (2008). Associated factors of falls in nursing home residents in Hong Kong and the role of restraints: A cross-sectional survey using the Resident Assessment Instrument (RAI) 2.0. *Aging-Clinical & Experimental Research, 20*(5), 447-453.

Lee, S., Wright, S., Sayer, J., Parr, A. M., Gray, R., & Gournay, K. (2001). Physical restraint training for nurses in English and Welsh psychiatric intensive care and regional secure units. *Journal of Mental Health, 10*(2), 151-162.

Lepping, P., Steinert, T., Needham, I., Abderhalden, C., Flammer, E., & Schmid, P. (2009). Ward safety perceived by ward managers in Britain, Germany and Switzerland: Identifying factors that improve ability to deal with violence. *Journal of Psychiatric & Mental Health Nursing, 16*(7), 629-635.

Livingston, J., Verdun-Jones, S., Brink, J., Lussier, P., & Nicholls, T. (2010). A narrative review of the effectiveness of aggression management training programs for psychiatric hospital staff. *Journal of Forensic Nursing 6*(1), 15-28.

Ludwick, R., Meehan, A., Zeller, R., & O'Toole, R. (2008). Safety work: Initiating, maintaining, and terminating restraints. *Clinical Nurse Specialist, 22*(2), 81-87.

Lyons, S. S. (2004). *Fall prevention for older adults: Evidence-based protocol*. Iowa City, Iowa: The University of Iowa Gerontological Nursing Interventions Research Center Research Translation and Dissemination Core.

Maccioli, G. A., Dorman, T., Brown, B. R., Mazuski, J. E., McLean, B. A., Kuszaj, J. M.,…Peruzzi, W. T. (2003). Clinical practice guidelines for the maintenance of patient physical safety in the intensive care unit: Use of restraining therapies–American College of Critical Care Medicine Task Force 2001-2002. *Critical Care Medicine, 31*(11), 2665-2676.

Mamun, K. & Lim, J. (2005). Use of physical restraints in nursing homes: Current practice in Singapore. *Annals of the Academy of Medicine, Singapore, 34*(2), 158-162.

Mayers, P., Keet, N., Winkler, G., & Flisher, A. J. (2010). Mental health service users' perceptions and experiences of sedation, seclusion and restraint. *The International Journal of Social Psychiatry, 56*(1), 60-73.

McCue, R. E., Urcuyo, L., Lilu, Y., Tobias, T., & Chambers, M. J. (2004). Reducing restraint use in a public psychiatric inpatient service. *Journal of Behavioral Health Services & Research, 31*(2), 217-224.

McGongal-Kenney, M. L., & Schutte, D. L. (2004). *Non-pharmacological management of agitated behaviours in persons with Alzheimer Disease and other chronic dementing conditions*. University of Iowa Gerontological Nursing Interventions Research Center Research Translation and Dissemination Core.

Mental Health Commission of Canada. (2009). Toward recovery and well-being. A framework for a mental health strategy for Canada. Retrieved from http://www.mentalhealthcommission.ca/English/Pages/Reports.aspx

Ministry of Health and Long-Term Care. (1996) Health Care Consent Act. Retrieved from http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_96h02_e.htm

Ministry of Health and Long Term Care. (1990). Ontario Mental Health Act. Retrieved from http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90m07_e.htm

Ministry of Health and Long Term Care. (2001) Patient Restraints Minimization Act. Retrieved from http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_01p16_e.htm

Ministry of Health and Long-Term Care. (2007). Long Term Care Home Act. (2007). Retrieved from http://www.health.gov.on.ca/english/public/legislation/ltc_homes/ltc_homes.html

Minnick, A. F., Mion, L. C., Johnson, M. E., Catrambone, C., & Leipzig, R. (2007). Prevalence and variation of physical restraint use in acute care settings in the US. *Journal of Nursing Scholarship, 39*(1), 30-37.

Möhler R., Richter T., Köpke S., & Meyer G. (2011). Interventions for preventing and reducing the use of physical restraints in long-term geriatric care (Review). *Cochrane Database of Systematic Reviews,* 2011, *2*. Art. No.: CD007546. DOI: 10.1002/14651858.CD007546.pub2

Mosby's Dental Dictionary, 2nd edition. (2008). Retrieved from http://medical-dictionary.thefreedictionary.com/predisposition

Mosby's Medical Dictionary, 8th edition. (2009). Retrieved from http://medical-dictionary.thefreedictionary.com

Muralidharan S., & Fenton, M. (2008). Containment strategies for people with serious mental illness. *Cochrane Database of Systematic Reviews* 2006, Issue 3, Art. No.: CD002084. DOI: 10.1002/14651858.CD002084.pub2

National Collaborating Centre for Nursing and Supportive Care (NCCNSC). (2005). *Violence: The short-term management of disturbed/violent behaviour in psychiatric in-patient settings and emergency departments*. London (UK): National Institute for Clinical Excellence (NICE).

National Council for Community Behavioural Healthcare. (2007) Definition of Seclusion. Retrieved from http://www.thenationalcouncil.org/cs/public_policy/restraints_seclusion_rules_chart

National Executive Training Institute. (2005). *Training curriculum for reduction of seclusion and restraint. Draft curriculum manual.* Alexandria, VA: National Association of State Mental Health Program Directors (NASMHPD), National Technical Assistance Center for State Mental Health Planning (NTAC). Retrieved from http://www.health.vic.gov.au/chiefpsychiatrist/creatingsafety/ntac/module6.pdf

National Health and Medical Research Centre. (1998). How to review the evidence: Systematic identification and review of the scientific literature Retrieved from http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/cp65.pdf

National Institute for Clinical Excellence (NICE). (2004). *Self-harm: The short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care. Clinical guideline 16*. London, UK: Gaskell & British Psychological Society.

Nay, R., & Koch, S. (2006). Overcoming restraint use: Examining barriers in Australian aged care facilities. *Journal of Gerontological Nursing, 32*(1), 33-38.

Nelstrop, L., Chandler-Oatts, J., Bingley, W., Bleetman, T., Corr, F., Cronin-Davis, J.,…Tsuchiya, A. (2006). A systematic review of the safety and effectiveness of restraint and seclusion as interventions for the short-term management of violence in adult psychiatric inpatient settings and emergency departments. *Worldviews on Evidence-Based Nursing, 3*(1), 8-18.

Ng, K. P., McMaster, F. R., & Heng, B. H. (2008). The effectiveness of bedrails in preventing falls. *Singapore Nursing Journal, 35*(4), 10-17.

Nobili, A., Piana, I., Balossi, L., Pasina, L., Matucci, M., Tarantola, M.,… Tettamanti, M. (2008). Alzheimer special care units compared with traditional nursing home for dementia care: Are there differences at admission and in clinical outcomes? *Alzheimer Disease & Associated Disorders, 22*(4), 352-361.

Office of the Chief Coroner, Province of Ontario, Canada (2008). *Verdict of the Coroner's Jury: Jeffery James.* Retrieved from http://www.sse.gov.on.ca/mohltc/PPAO/en/Documents/sys-inq-jam.pdf

O'Hagan, M., Divis, M., & Long, J. (2008). *Best practice in the reduction and elimination of seclusion and restraint; Seclusion: Time for change.* Auckland: Te Pou Te Whakaaro Nui: The National Centre of Mental Health Research, Information and Workforce Development.

Park M., Hsiao-Chen Tang, J., & Ledford, L. (2005). *Changing the practice of physical restraint use in acute care*. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Translation and Dissemination Core.

Pekkarinen, L., Elovainio, M., Sinervo, T., Finne-Soveri, H., & Noro, A. (2006). Nursing working conditions in relation to restraint practices in long-term care units. *Medical Care, 44*(12), 1114-1120.

Pellfolk, T. J., Gustafson, Y., Bucht, G., & Karlsson, S. (2010). Effects of a restraint minimization program on staff knowledge, attitudes, and practice: A cluster randomized trial. *Journal of the American Geriatrics Society, 58*(1), 62-69.

Petti, T. A., Mohr, W. K., Somers, J. W., & Sims, L. (2001). Perceptions of seclusion and restraint by patients and staff in an intermediate-term care facility. *Journal of Child & Adolescent Psychiatric Nursing, 14*(3), 115-127.

Pollard, R., Yanasak, E. V., Rogers, S. A., & Tapp, A. (2006). Organizational and unit factors contributing to reduction in the use of seclusion and restraint procedures on an acute psychiatric inpatient unit. *Psychiatric Quarterly, 78*(1), 73-81.

Prescott, D. L., Madden, L. M., Dennis, M., Tisher, P., & Wingate, C. (2007). Reducing mechanical restraints in acute psychiatric care settings using rapid response teams. *Journal of Behavioral Health Services & Research, 34*(1), 96-105.

Putman, L. & Wang, J. T. (2007). The Closing Group: Therapeutic recreation for nursing home residents with dementia and accompanying agitation and/or anxiety. *American Journal of Alzheimer's Disease & Other Dementias, 22*(3), 167-175.

Ralphs-Thibodeau, S. Knoefel, F., Benjamin, K., Leclerc, A., Pisterman, S., Sohmer, J., & Scrim, C. (2006). Patient choice: An influencing factor on policy-related research to decrease bedrail use as physical restraint. *Worldviews on Evidence-Based Nursing*, *3*(1), 31-39.

Rask, K., Parmelee, P. A., Taylor, J. A., Green, D., Brown, H., Hawley, J.,…Ouslander, G. (2007). Implementation and evaluation of a nursing home fall management program. *Journal of the American Geriatrics Society, 55*(3), 342-349.

Registered Nurses' Association of Ontario (2002). *Toolkit: Implementation of clinical practice guidelines.* Toronto, Canada: Registered Nurses' Association of Ontario.

Registered Nurses' Association of Ontario (RNAO). (rev. 2006a). *Client Centred Care*. Toronto (ON): Registered Nurses' Association of Ontario.

Registered Nurses' Association of Ontario (RNAO). (rev. 2006b). *Crisis Intervention*. Toronto (ON): Registered Nurses' Association of Ontario.

Registered Nurses' Association of Ontario (RNAO). (rev. 2006c). *Establishing therapeutic relationships*. Toronto (ON): Registered Nurses' Association of Ontario.

Registered Nurses' Association of Ontario (RNAO). (rev. 2007a). *Assessment & Management of Pain*. Toronto (ON): Registered Nurses' Association of Ontario.

Registered Nurses' Association of Ontario (2007b). *Developing and Sustaining Effective Staffing and Workload Practice*. Toronto. Registered Nurses' Association of Ontario.

Registered Nurses' Association of Ontario (RNAO). (rev. 2010a). *Caregiving Strategies for Older Adults with Delirium, Dementia and Depression*. Toronto (ON): Registered Nurses' Association of Ontario.

Registered Nurses' Association of Ontario (RNAO). (rev. 2010b). *Screening for Delirium, Dementia and Depression in Older Adults*. Toronto (ON): Registered Nurses' Association of Ontario.

Registered Nurses' Association of Ontario (RNAO). (rev. 2011). *Prevention of falls and fall injuries in the older adult*. Toronto (ON): Registered Nurses' Association of Ontario.

Ryan, C. J. & Bowers, L. (2006). An analysis of nurses' post-incident manual restraint reports. *Journal of Psychiatric and Mental Health Nursing, 13*(5), 527–532. Doi: 10.1111/j.1365-2850.2006.00975.x

Saarnio, R., Isola, A., & Laukkala, H. (2008). The use of physical restraint in institutional care of older people in Finland: Nurses' individual, communal and alternative modes of action. *Journal of Clinical Nursing, 18*(1), 132-140.

Safer Healthcare Now! (SHN). (2010). Reducing falls and injury from falls. Getting started kit. Retrieved from http://www.saferhealthcarenow.ca/EN/Interventions/Falls/Pages/default.aspx.

Sandhu, S., Mion, L., Khan, R., Ludwick, R., Claridge, J., Pile, J.,… Dietrich,M. (2010). Likelihood of ordering physical restraints: Influence of physician characteristics. *Journal of the American Geriatrics Society, 58* (7), 1272-1278. Doi: 10.1111/j.1532-5415.2010.02950.x

Schrank, B., & Slade, M. (2007). Recovery in psychiatry. *Psychiatric Bulletin September*, *31*, 321-325.

Sequeira, H. & Halstead, S. (2002). Control and restraint in the UK: Service user perspectives. *British Journal of Forensic Practice, 4*(1), 9-18.

Sequeira, H. & Halstead, S. (2004). The psychological effects on nursing staff of administering physical restraint in a secure psychiatric hospital: 'When I go home, it's then that I think about it'. *British Journal of Forensic Practice, 6*(1), 3-15.

Shah, A., Chiu, E., Ames, D., Harrigan, S., & McKenzie, D. (2000). Characteristics of aggressive subjects in Australian (Melbourne) nursing homes. *International Psychogeriatrics, 12*(2), 145-161.

Skemp Kelley, L., Pringle Specht, J. K., Maas, M. L. (2001). *Family involvement in care for persons with Dementia.* Iowa City, Iowa: The University of Iowa Gerontological Nursing Interventions Research Center Research Translation and Dissemination Core.

Smith, N. H., Timms, J., Parker, V. G., Reimels, E. M., & Hamlin, A. (2003). The impact of education on the use of physical restraints in the acute care setting. *Journal of Continuing Education in Nursing, 34*(1), 26-33.

Snyder, B. S. (2004). Preventing treatment interference: Nurses' and parents' intervention strategies. *Pediatric Nursing, 30*(1), 31-40.

Strout, T. (2010). Perspectives on the experience of being physically restrained: An integrative review of the qualitative literature. *International Journal of Mental Health Nursing 19,* 416-427. Doi: 10.1111/j.1447-0349.2010.00694.x

Sullivan-Marx, E. M., Kurlowicz, L. H., Maislin, G., & Carson, J. L. (2001). Physical restraint among hospitalized nursing home residents: Predictors and outcomes. *Clinical Gerontologist, 24*(1-2), 85-101.

Sung, H. C., Chang, S. M., Lee, W. L., & Lee, M. S. (2006). The effects of group music with movement intervention on agitated behaviours of institutionalized elders with dementia in Taiwan. *Complementary Therapies in Medicine, 14*(2), 113-119.

Swauger, K. C. & Tomlin, C. C. (2000). Moving toward restraint-free patient care. *Journal of Nursing Administration, 30*(6), 325-329.

Tenneij, N. H., Goedhard, L. E., Stolker, J. J., Nijman, H., & Koot, H. M. (2009). The correspondence between the Staff Observation Aggression Scale-Revised and two other indicators for aggressive incidents. *Archives of Psychiatric Nursing, 23*(4), 283-288.

Testad, I., Aasland, A. M., & Aarsland, D. (2005). The effect of staff training on the use of restraint in dementia: A single-blind randomized controlled trial. *International Journal of Geriatric Psychiatry, 20*(6), 587-590.

Testad, I., Ballard, C., Bronnick, K., & Aarsland, D. (2010). The effect of staff training on agitation and use of restraint in nursing home residents with dementia: A single-blind, randomized controlled trial. *Journal of Clinical Psychiatry, 71*(1), 80-86.

Thapa, P. B., Palmer, S. L., Owen, R. R., Huntley, A. L., Clardy, J. A., & Miller, L. H. (2003). P.R.N. (as-needed) orders and exposure of psychiatric inpatients to unnecessary psychotropic medications. *Psychiatric Services, 54*(9), 1282-1286.

Turgay, A. S., Sari, D., & Genc, R. E. (2009). Physical restraint use in Turkish intensive care units. *Clinical Nurse Specialist, 23*(2), 68-72.

Tzeng, H. M., Yin, C. Y., & Grunawalt, J. (2008). Effective assessment of use of sitters by nurses in inpatient care settings. *Journal of Advanced Nursing, 64*(2), 176-183.

Unruh, L., Joseph, L., & Strickland, M. (2007). Nurse absenteeism and workload: Negative effect on restraint use, incident reports and mortality. *Journal of Advanced Nursing, 60*(6), 673-681.

Vance, D. L. (2003). Effect of a treatment interference protocol on clinical decision making for restraint use in the intensive care unit: A pilot study. *AACN Clinical Issues, 14*(1), 82-91.

Vidan, M. T., Sanchez, E., Alonso, M., Montero, B., Ortiz, J., & Serra, J. A. (2009). An intervention integrated into daily clinical practice reduces the incidence of delirium during hospitalization in elderly patients. *Journal of the American Geriatrics Society, 57*(11), 2029-2036.

Voyer, P., Verreault, R., Mengue, P. N., Laurin, D., Rochette, L., Martin, L. S., & Baillargeon, L. (2005). Determinants of neuroleptic drug use in long-term facilities for elderly persons. *Journal of Applied Gerontology, 24*(3), 179-195.

Wagner, L. M., Capezuti, E., Brush, B., Boltz, M., Renz, S., & Talerico, K. A. (2007). Description of an advanced practice nursing consultative model to reduce restrictive siderail use in nursing homes. *Research in Nursing & Health, 30*(2), 131-140.

Werner, P. (2002). Perceptions regarding the use of physical restraints with elderly persons: Comparison of Israeli

health care nurses and social workers. *Journal of Interprofessional Care, 16*(1), 59-68.

Werner, P., & Mendelsson, G., (2001). Nursing staff members' intentions to use physical restraints with older people: Testing the theory of reasoned action. *Journal of Advanced Nursing* 35*(5)*, 784-791.

Whitman, G. R., Davidson, L. J., Rudy, E. B., & Sereika, S. M. (2001). Practice patterns related to mechanical restraint use across a multi-institutional health care system. *Outcomes Management for Nursing Practice, 5*(3), 102-111.

Williams, J. E. & Myers, R. E. (2001). Relationship of less restrictive interventions with seclusion/restraints usage, average years of psychiatric experience, and staff mix. *Journal of the American Psychiatric Nurses Association, 7*(5), 139-144.

Wong, I. S. & Chien, W. T. (2005). Young medical patients' experience of physical restraint: An exploratory study. *Journal of Clinical Nursing, 14*(1), 120-121.

World Health Organization (WHO). (2009). More than words. Conceptual framework for the international classification for patient safety. Version 1.1. Final Technical Report, January 2009. Retrieved from http://www.who.int/patientsafety/en/

Wynn, R. (2004). Psychiatric inpatients' experiences with restraint. *Journal of Forensic Psychiatry and Psychology, 15*(1), 124-144.

Yamamoto, M., Izumi, K., & Usui, K. (2006). Dilemmas facing Japanese nurses regarding the physical restraint of elderly patients. *Japan Journal of Nursing Science, 3*(1), 43-50.

Bibliography

Allen, D. E., de Nesnera, A., & Souther, J. W. (2009). Executive-level reviews of seclusion and restraint promote interdisciplinary collaboration and innovation. *Journal of the American Psychiatric Nurses Association, 15*(4), 260-264.

Allen, M. H., Currier, G. W., Hughes, D. H., Docherty, J. P., Carpenter, D., & Ross, R. (2003). Treatment of behavioral emergencies: A summary of the expert consensus guidelines. *Journal of Psychiatric Practice, 9*(1), 16-38.

Allen, M. H., Currier, G. W., Hughes, D. H., Reyes-Harde, M., Docherty, J. P., & Expert Consensus Panel for Behavioral Emergencies. (2001). The Expert Consensus Guideline Series. Treatment of behavioral emergencies. *Postgraduate Medicine,* 1-90.

Allen, R.S., Burgio, L.D., Fisher, S.E., Michael, H.J., & Shuster, J.L., Jr. (2005). Behavioral characteristics of agitated nursing home residents with dementia at the end of life. *Gerontologist, 45*(5), 661-666.

Anders, R. L., Thapinta, D., Wiwatkunupakan, S., Kitsumban, V., & Vadtanapong, S. (2003). Assessment of inpatient treatment of mentally ill patients in Thailand: Implications for practice. [Review]. *Contemporary Nurse, 15*(3), 322-332.

Annequin, D., Carbajal, R., Chauvin, P., Gall, O., Tourniaire, B., & Murat, I. (2000). Fixed 50% nitrous oxide oxygen mixture for painful procedures: A French survey. *Pediatrics, 105*(4), e47.

Antonelli, M. T. (2008). Restraint management: Moving from outcome to process. *Journal of Nursing Care Quality, 23*(3), 227-232.

Arling, G. & Williams, A. R. (2003). Cognitive impairment and resource use of nursing home residents: A structural equation model. *Medical Care, 41*(7), 802-812.

Arling, G., Kane, R. L., Mueller, C., Bershadsky, J., & Degenholtz, H. B. (2007). Nursing effort and quality of care for nursing home residents. *Gerontologist, 47*(5), 672-682.

Arling, G., Lewis, T., Kane, R. L., Mueller, C., & Flood, S. (2007). Improving quality assessment through multilevel modeling: The case of nursing home compare. *Health Services Research, 42*(3p1), 1177-1199.

Austin, W., Bergum, V., & Nuttgens, S. (2004). Addressing oppression in psychiatric care: A relational ethics perspective. *Ethical Human Psychology & Psychiatry, 6*(1), 69-78.

Ayalon, L., Bornfeld, H., Gum, A.M., & Areán, P.A. (2009). The use of problem-solving therapy and restraint-free environment for the management of depression and agitation in long-term care. *Clinical Gerontologist, 32*(1), 77-90.

Aydin, C. E., Bolton, L. B., Donaldson, N., Brown, D. S., Buffum, M., Elashoff, J. D., & Sandhu, M. (2004). Creating and analyzing a state-wide nursing quality measurement database. *Journal of Nursing Scholarship, 36*(4), 371-378.

Bailey, M., Amato, S., & Mouhlas, C. (2009). A creative alternative for providing constant observation on an acute-brain-injury unit. *Rehabilitation Nursing, 34*(1), 11-16.

Bar-Meir, E., Zaslansky, R., Regev, E., Keidan, I., Orenstein, A., & Winkler, E. (2006). Nitrous oxide administered by the plastic surgeon for repair of facial lacerations in children in the emergency room. *Plastic & Reconstructive Surgery, 117*(5), 1571-1575.

Barton, S. A., Johnson, M. R., & Price, L. V. (2009). Achieving restraint-free on an inpatient behavioral health unit. *Journal of Psychosocial Nursing & Mental Health Services, 47*(1), 34-40.

Beech, B. (2001). Managing aggression and violence in care settings: A review of the legal and ethical content of staff training courses. *Journal of Adult Protection, 3*(2), 8-17.

Bell, F., Szmukler, G., & Carson, J. (2000). Violence and its management in in-patient mental health settings: A review of the literature. *Mental Health & Learning Disabilities Care, 3,* 370-372.

Bernick, L. & Bretholz, I. (2001). Safe Mobility Program: A comprehensive falls prevention program for a multi-level geriatric setting. *Perspectives: The Journal of the Gerontological Nursing Association, 25*(3), 12-19.

Beyaztas, F. & Tel, H. (2005). Nurses and physicians' opinions and approaches towards the use of physical restraints. *Neurology Psychiatry and Brain Research, 12*(2), 85-90.

Boocock, M. G., Weyman, A. K., & McIlroy, R. (2006). Bedside safety rails: Assessment of strength requirements and the appropriateness of current designs. *Ergonomics, 49*(7), 631-650.

Bostick, J. E. (2004). Relationship of nursing personnel and nursing home care quality. *Journal of Nursing Care Quality, 19*(2), 130-136.

Boudreaux, E. D., Allen, M. H., Claassen, C., Currier, G. W., Bertman, L., Glick, R.,…Camargo, C.A. (2009). The Psychiatric Emergency Research Collaboration-01: Methods and results. *General Hospital Psychiatry, 31*(6), 515-522.

Boustani, M., Munger, S., Beck, R., Campbell, N., & Weiner, M. (2007). A gero-informatics tool to enhance the care of hospitalized older adults with cognitive impairment. *Clinical Interventions In Aging, 2*(2), 247-253.

Bower, F. L., McCullough, C. S., & Timmons, M. E. (2000). A synthesis of what we know about the use of physical restraints and seclusion with patients in psychiatric and acute care settings. *Online Journal of Knowledge Synthesis for Nursing, 7*(2), 22-44.

Bower, F. L., McCullough, C. S., & Timmons, M. E. (2003). A synthesis of what we know about the use of physical restraints and seclusion with patients in psychiatric and acute care settings: 2003 update. [Review]. *Online Journal of Knowledge Synthesis for Nursing, 10(*1).

Bowers, L., Alexander, J., Simpson, A., Ryan, C., & Carr-Walker, P. (2004). Cultures of psychiatry and the professional socialization process: The case of containment methods for disturbed patients. *Nurse Education Today, 24*(6), 435-442.

Bowers, L., Alexander, J., Simpson, A., Ryan, C., & Carr-Walker, P. (2007). Student psychiatric nurses' approval of containment measures: Relationship to perception of aggression and attitudes to personality disorder. *International Journal of Nursing Studies, 44*(3), 349-356.

Bowers, L., Brennan, G., Flood, C., Lipang, M., & Oladapo, P. (2006). Preliminary outcomes of a trial to reduce conflict and containment on acute psychiatric wards: City Nurses. *Journal of Psychiatric & Mental Health Nursing, 13*(2), 165-172.

Bowers, L., Nijman, H., Allan, T., Simpson, A., Warren, J., & Turner, L. (2006). Prevention and management of aggression training and violent incidents on U.K. Acute psychiatric wards. *Psychiatric Services, 57*(7), 1022-1026.

Bowers, T. (2002). The need for education over legislation in reducing restraint use in health care facilities. [Review]. *Perspectives, 26*(4), 4-6.

Bredthauer, D., Becker, C., Eichner, B., Koczy, P., & Nikolaus, T. (2005). Factors relating to the use of physical restraints in psychogeriatric care: A paradigm for elder abuse. *Zeitschrift fur Gerontologie und Geriatrie, 38(1),* 10-18.

Brend, M. & Jackson, D. (2006). Finding positive alternatives to physical restraint. *Learning Disability Practice, 9*(4), 32-38.

Brenner, M. (2007). Child restraint in the acute setting of pediatric nursing: An extraordinarily stressful event. *Issues in Comprehensive Pediatric Nursing, 30 (1-2),* 29-37.

Burnes, B. L., Aydin, C. E., Donaldson, N., Brown, D. S., Sandhu, M., Fridman, M., Aronow, H.U. (2007). Mandated nurse staffing ratios in California: A comparison of staffing and nursing-sensitive outcomes pre- and post regulation. *Policy, Politics, & Nursing Practice, 8*(4), 238-250.

Camp, C. J., Cohen-Mansfield, J., & Capezuti, E. A. (2002). Use of nonpharmacologic interventions among nursing home residents with dementia. [Review]. *Psychiatric Services, 53*(11), 1397-1401.

Capezuti, E. (2004). Minimizing the use of restrictive devices in dementia patients at risk for falling. *Nursing Clinics of North America, 39*(3), 625-647.

Capezuti, E. A., & Wagner, L. M. (2006). Restraints and immobility. *Principles and Practice of Geriatric Medicine*, *2*(4), 1689-1699.

Carroll-Solomon, P. A., Christian, V., Denny, D. S., Nordan, V. N., Therriault, M. F., & Van, W. R. (2000). Preserving residents' rights in long-term care settings: A values-based approach to restraint reduction. *Journal for Healthcare Quality, 22*(4), 10-19.

Castle, N. G. & Engberg, J. (2005). Staff turnover and quality of care in nursing homes. *Medical Care, 43*(6), 616-626.

Castle, N. G., Degenholtz, H., & Engberg, J. (2005). State variability in indicators of quality of care in nursing facilities. *Journals of Gerontology Series A-Biological Sciences & Medical Sciences, 60*(9), 1173-1179.

Chabora, N., Judge-Gorny, M., & Grogan, K. (2003). The Four S Model in action for de-escalation. An innovative state hospital-university collaborative endeavor. *Journal of Psychosocial Nursing & Mental Health Services, 41*(1), 22-28.

Chappell, N. L. & Reid, R. C. (2000). Dimensions of care for dementia sufferers in long-term care institutions: Are they related to outcomes? *Journals of Gerontology Series B-Psychological Sciences & Social Sciences, 55*(4), S234-S244.

Chengappa, K. N. R., Levine, J., Ulrich, R., Parepally, H., Brar, J. S., Atzert, R.,…Gopalani, A. (2000). Impact of risperidone on seclusion and restraint at a state psychiatric hospital. *Canadian Journal of Psychiatry, 45*(9), 827-832.

Chien, W. T., Chan, C. W. H., Lam, L. W., & Kam, C. W. (2005). Psychiatric inpatients' perceptions of positive and negative aspects of physical restraint. *Patient Education and Counseling, 59*(1), 80-86.

Choi, B. & Pak, A. (2006). Multidisciplinary, interdisciplinary, and transdisciplinary in health research, services, education and policy: 1. Definitions, objectives, and evidence of effectiveness. *Clinical and Investigative Medicine, 29*(6), 351–364.

Christiansen, E. & Chambers, N. (2005). Induction of anesthesia in a combative child: Management and issues. *Paediatric Anaesthesia, 15*(5), 421-425.

Collins, R. J. (2006). Medication sleuth: An important role for pharmacists in determining the etiology of delirium. *Consultant Pharmacist, 21*(4), 293-297.

Comondore, V. R., Devereaux, P. J., Zhou, Q., Stone, S. B., Busse, J. W., Ravindran, N. C.,…Guyatt, G.H. (2009). Quality of care in for-profit and not-for-profit nursing homes: Systematic review and meta-analysis. *British Medical Journal, 339*(7717), 381-384.

Cook, R., Mayne, C., Gardner, G., & Lawrence, T. (2002). Policy development through action research: Managing aggressive behaviour in patients with traumatic brain injury. *Australasian Journal of Neuroscience, 15*(3), 5-12.

Cravero, J. P., Beach, M., Dodge, C. P., & Whalen, K. (2000). Emergence characteristics of sevoflurane compared to halothane in pediatric patients undergoing bilateral pressure equalization tube insertion. *Journal of Clinical Anesthesia, 12*(5), 397-401.

Daffern, M., Mayer, M., & Martin, T. (2006). Staff gender ratio and aggression in a forensic psychiatric hospital. *International Journal of Mental Health Nursing, 15*(2), 93-99.

Day, J., Higgins, I., & Koch, T. (2009). The process of practice redesign in delirium care for hospitalized older people: A participatory action research study. *International Journal of Nursing Studies, 46*(10), 13-22.

Delaney, K. R. (2006). Evidence base for practice: Reduction of restraint and seclusion use during child and adolescent psychiatric inpatient treatment. *Worldviews on Evidence-Based Nursing, 3*(1), 19-30.

Demir, Z. A. (2009). Attitudes, informed consent obtaining rates and feelings about physical restraint use among nurses. *Turkiye Klinikleri Journal of Medical Sciences, 29*(6), 1573-1581.

Dewey, K. & Brill, C. (2000). Decrease in restraint use in a study of a geropsychiatric unit. *Journal of Psychosocial Nursing & Mental Health Services, 38*(10), 14-18.

Dimant, J. (2003). Avoiding physical restraints in long-term care facilities. *Journal of the American Medical Directors Association, 4*(4), 207-215.

Downey, L. V. A., Zun, L. S., & Gonzales, S. J. (2007). Frequency of alternative to restraints and seclusion and uses of agitation reduction techniques in the emergency department. *General Hospital Psychiatry, 29*(6), 470-474.

Encinares, M. & Pullan, S. (2003). The balancing act. Collaboration between frontline forensic staff and hospital administration. *Journal of Psychosocial Nursing & Mental Health Services, 41*(12), 36-45.

Evans, L. K. & Cotter, V. T. (1950). Avoiding restraints in patients with dementia: Understanding, prevention, and management are the keys. *American Journal of Nursing, 108*(3), 40-49.

Faezah, S.K., Zhang, D., & Yin, L.F. (2008). The prevalence and risk factors of delirium amongst the elderly in acute hospital. *Singapore Nursing Journal, 35,* 11-14.

Farrell, G. & Cubit, K. (2005). Nurses under threat: A comparison of content of 28 aggression management programs. [Review]. *International Journal of Mental Health Nursing, 14*(1), 44-53.

Fishman, G., Botzer, E., Marouani, N., & DeRowe, A. (2005). Nitrous oxide-oxygen inhalation for outpatient otologic examination and minor procedures performed on the uncooperative child. *International Journal of Pediatric Otorhinolaryngology, 69*(4), 501-504.

Flaherty, J. H., Tariq, S. H., Raghavan, S., Bakshi, S., Moinuddin, A., & Morley, J. E. (2003). A model for managing delirious older inpatients. *Journal of the American Geriatrics Society, 51*(7), 1031-1035.

Foley, K. L., Sudha, S., Sloane, P. D., & Gold, D. T. (2003). Staff perceptions of successful management of severe behavioral problems in dementia special care units. *Dementia, 2*(1), 105-124.

Fonad, E., Emami, A., Wahlin, T. B., Winblad, B., & Sandmark, H. (2009). Falls in somatic and dementia wards at Community Care Units. *Scandinavian Journal of Caring Sciences, 23*(1), 2-10.

Foster, C., Bowers, L., & Nijman, H. (2007). Aggressive behavior on acute psychiatric wards: Prevalence, severity and management. *Journal of Advanced Nursing, 58*(2), 140-149.

Fowler, N. A. (2006). Aromatherapy, used as an integrative tool for crisis management by adolescents in a residential treatment center. *Journal of Child & Adolescent Psychiatric Nursing, 19*(2), 69-76.

Fralick, S. L. (2007). A restraint utilization project. *Nursing Administration Quarterly, 31*(3), 219-225.

Frezza, E. E., Carleton, G. L., & Valenziano, C. P. (2000). A quality improvement and risk management initiative for surgical ICU patients: A study of the effects of physical restraints and sedation on the incidence of self-extubation. *American Journal of Medical Quality, 15*(5), 221-225.

Friedman, R. M., Pinto, A., Behar, L., Bush, N., Chirolla, A., Epstein, M.,…Young, C.K. (2006). Unlicensed residential programs: The next challenge in protecting youth. *American Journal of Orthopsychiatry, 76*(3), 295-303.

Gallinagh, R., Nevin, R., McIlroy, D., Mitchell, F., Campbell, L., Ludwick, R., & McKenna, H. (2002). The use of physical restraints as a safety measure in the care of older people in four rehabilitation wards: Findings from an exploratory study. *International Journal of Nursing Studies, 39*(2), 147-156.

Gaskin, C. J., Elsom, S. J., & Happell, B. (2007). Interventions for reducing the use of seclusion in psychiatric facilities: Review of the literature. [Review]. *British Journal of Psychiatry, 191,* 298-303.

Gelkopf, M., Roffe, Z., Behrbalk, P., Melamed, Y., Werbloff, N., & Bleich, A. (2009). Attitudes, opinions, behaviors, and emotions of the nursing staff toward patient restraint. [Review]. *Issues in Mental Health Nursing, 30*(12), 758-763.

Gerolamo, A. M. (2006). The conceptualization of physical restraint as a nursing-sensitive adverse outcome in acute care psychiatric treatment settings. *Archives of Psychiatric Nursing, 20*(4), 175-185.

Gerolamo, A. M. (2008). Measuring adverse outcomes in inpatient psychiatry: The reliability of nurse recall. *Archives of Psychiatric Nursing, 22*(2), 95-103.

Gillespie, G. L., Gates, D. M., Miller, M., & Howard, P. K. (2010). Violence against healthcare workers in a pediatric emergency department. *Advanced Emergency Nursing Journal, 32*(1), 68-82.

Goldbloom, D. L., Mojtabai, R., & Serby, M. J. (2010). Weekend prescribing practices and subsequent seclusion and restraint in a psychiatric inpatient setting. *Psychiatric Services, 61*(2), 193-195.

Goodson, J., Jang, W., & Rantz, M. (2008). Nursing home care quality: Insights from a Bayesian network approach. *Gerontologist, 48*(3), 338-348.

Grabowski, D. C., Angelelli, J. J., & Mor, V. (2004). Medicaid payment and risk-adjusted nursing home quality measures. *Health Affairs, 23*(5), 243-252.

Graham, A. (2002). The use of physical interventions in managing violence in mental health settings. *Mental Health Practice, 6*(4), 10-15.

Green, B. & Robinson, L. (2005). Reducing violence in a forensic mental health unit: A seven-year study. *Mental Health Practice, 9*(4), 40-44.

Grigg, M. (2006). Eliminating seclusion and restraint in Australia. *International Journal of Mental Health Nursing, 15*(4), 224-225.

Gruneir, A., Lapane, K. L., Miller, S. C., & Mor, V. (2008). Does the presence of a dementia special care unit improve nursing home quality? *Journal of Aging & Health, 20*(7), 837-854.

Gruneir, A., Lapane, K. L., Miller, S. C., & Mor, V. (2008). Is dementia special care really special? A new look at an old question. *Journal of the American Geriatrics Society, 56*(2), 199-205.

Gudjonsson, G. H., Rabe-Hesketh, S., & Szmukler, G. (2004). Management of psychiatric in-patient violence: Patient ethnicity and use of medication, restraint and seclusion. *British Journal of Psychiatry, 184*(3), 258-262.

Hamers, J. P. & Huizing, A. R. (2005). Why do we use physical restraints in the elderly? *Zeitschrift fur Gerontologie und Geriatrie, 38*(1), 19-25.

Hancock, C. K., Buster, P. A., Oliver, M. S., Fox, S. W., Morrison, E., & Burger, S. L. (2001). Restraint reduction in acute care: An interdisciplinary approach. *Journal of Nursing Administration, 31*(2), 74-77.

Hantikainen, V. & Kappeli, S. (2000). Using restraint with nursing home residents: A qualitative study of nursing staff perceptions and decision-making. *Journal of Advanced Nursing, 32*(5), 1196-1205.

Hantikainen, V. (2001). Nursing staff perceptions of the behaviour of older nursing home residents and decision making on restraint use: A qualitative and interpretative study. *Journal of Clinical Nursing, 10*(2), 246-256.

Happ, M. B. (2000). Preventing treatment interference: The nurse's role in maintaining technologic devices. *Heart & Lung, 29*(1), 60-69.

Happ, M. B. (2002). Treatment interference in critically ill patients: An update on unplanned extubation. *Clinical Pulmonary Medicine, 9*(2), 81-86.

Harmon, R. B. (2009). Hydrotherapy in state mental hospitals in the mid-twentieth century. *Issues in Mental Health Nursing, 30*(8), 491-494.

Harmsen, M., Geurts, A. C., Fasotti, L., & Bevaart, B. J. (2004). Positive behavioural disturbances in the rehabilitation phase after severe traumatic brain injury: An historic cohort study. *Brain Injury, 18*(8), 787-796.

Haut, A., Kopke, S., Gerlach, A., Muhlhauser, I., Haastert, B., & Meyer, G. (2009). Evaluation of an evidence-based guidance on the reduction of physical restraints in nursing homes: A cluster-randomised controlled trial [ISRCTN34974819]. *BMC Geriatrics, 9*(42).

Heinze, C., Halfens, R. J., & Dassen, T. (2007). Falls in German in-patients and residents over 65 years of age. *Journal of Clinical Nursing, 16*(3), 495-501.

Helene, H. M., Heggen, K., & Ruyter, K. W. (2008). Creating trust in an acute psychiatric ward. *Nursing Ethics, 15*(6), 777-788.

Hellerstein, D. J., Seirmarco, G., Almeida, G., & Batchelder, S. (2008). Assessing behavioral coping preferences of psychiatric inpatients: A pilot study. *Medscape Journal of Medicine, 10*(12), 271.

Hine, K. (2007). The use of physical restraint in critical care. [Review]. *Nursing in Critical Care, 12*(1), 6-11.

Hoelzel, S. L. (2003). Reducing use of restraints on a rehabilitation unit. *Rehabilitation Nursing, 28*(3), 72-73.

Hofso, K., & Coyer, F. M. (2007). Part 1. Chemical and physical restraints in the management of the mechanically ventilated patients in the ICU: Contributing factors. *Intensive and Critical Care Nursing, 23*(5), 249-255.

Hofso, K. & Coyer, F. M. (2007). Part 2. Chemical and physical restraints in the management of mechanically ventilated patients in the ICU: A patient perspective. [Review]. *Intensive & Critical Care Nursing, 23*(6), 316-322.

Hollins, L. P. & Paterson, B. (2009). Physical intervention trainers: The case for greater accountability. *Journal of Psychiatric & Mental Health Nursing, 16*(4), 376-381.

Horsburgh, D. (2003). The ethical implications and legal aspects of patient restraint. [Review]. *Nursing Times, 99*(6), 26-27.

Huang, H. T., Chuang, Y. H., & Chiang, K. F. (2009). Nurses' physical restraint knowledge, attitudes, and practices: The effectiveness of an in-service education program. *Journal of Nursing Research, 17*(4), 241-248.

Hubner-Liebermann, B., Spiessl, H., Iwai, K., & Cording, C. (2005). Treatment of schizophrenia: Implications derived from an intercultural hospital comparison between Germany and Japan. *International Journal of Social Psychiatry, 51*(1), 83-96.

Huffman, J. C., Stern, T. A., Harley, R. M., & Lundy, N. A. (2003). The use of DBT skills in the treatment of difficult patients in the General Hospital. *Psychosomatics, 44*(5), 421-429.

Hughes, C. M. & Lapane, K. L. (2005). Administrative initiatives for reducing inappropriate prescribing of psychotropic drugs in nursing homes: How successful have they been? *Drugs & Aging, 22*(4), 339-351.

Hughes, C. M., Lapane, K. L., Mor, V., Ikegami, N., Jonsson, P. V., Ljunggren, G., Sgadari, A. (2000). The impact of legislation on psychotropic drug use in nursing homes: A cross-national perspective. *Journal of the American Geriatrics Society, 48*(8), 931-937.

Hughes, R. (2008). Chemical restraint in nursing older people. [Review]. *Nursing Older People, 20*(3), 33-38.

Huizing, A. R., Hamers, J. P., Gulpers, M. J., & Berger, M. P. (2006). Short-term effects of an educational intervention on physical restraint use: A cluster randomized trial. *BMC Geriatrics, 6,* 17.

Hyde, S., Fulbrook, P., Fenton, K., & Kilshaw, M. (2009). A clinical improvement project to develop and implement a decision-making framework for the use of seclusion. *International Journal of Mental Health Nursing, 18*(6), 398-408.

Inoue, K., Tanii, H., Hisashi, T., Nakao, K., Fukui, S., Fukui, N.,…Yuji, O. (2006). A report on research on the use of risperidone oral solution in a clinical setting. *International Medical Journal, 13*(3), 191-194.

Irving, K. (2002). Governing the conduct of conduct: Are restraints inevitable? *Journal of Advanced Nursing, 40*(4), 405-412.

Irving, K. (2004). Inappropriate restraint practices in Australian teaching hospitals. *Australian Journal of Advanced Nursing, 21*(4), 23-27.

Jacobs, B. R., Salman, B. A., Cotton, R. T., Lyons, K., & Brilli, R. J. (2001). Postoperative management of children after single-stage laryngotracheal reconstruction. *Critical Care Medicine, 29*(1), 164-168.

Janelli, L. & Kanski, G. (2000). The use of music to release the ties that bind. *Perspectives, 24*(2), 2-7.

Janelli, L. M., Kanski, G. W., & Wu, Y. W. (2004). The influence of individualized music on patients in physical restraints: A pilot study. *Journal of the New York State Nurses Association, 35*(2), 22-27.

Jarrett, M., Bowers, L., & Simpson, A. (2008). Coerced medication in psychiatric inpatient care: Literature review. *Journal of Advanced Nursing, 64*(6), 538-548.

Jensdottir, A. B., Rantz, M., Hjaltadottir, I., Gudmundsdottir, H., Rook, M., & Grando, V. (2003). International comparison of quality indicators in United States, Icelandic and Canadian nursing facilities. *International Nursing Review, 50*(2), 79-84.

Johnson, T. D. (2007). Respiratory assessment in child and adolescent residential treatment settings: Reducing restraint-associated risks. *Journal of Child & Adolescent Psychiatric Nursing, 20*(3), 176-183.

Jones, C., Backman, C., Capuzzo, M., Flaatten, H., Rylander, C., & Griffiths, R. D. (2007). Precipitants of post-traumatic stress disorder following intensive care: A hypothesis generating study of diversity in care. *Intensive Care Medicine, 33*(6), 978-985.

Jones, P. & Stenfert, K. B. (2008). Service users and staff from secure intellectual disability settings: Views on three physical restraint procedures. *Journal of Intellectual Disabilities, 12*(3), 229-237.

Kapp, M. B. (2008). Resistance to nursing home restraints reduction revisited: Introduction to a symposium. *Journal of Aging & Social Policy, 20*(3), 279-285.

Karger, B., Fracasso, T., & Pfeiffer, H. (2008). Fatalities related to medical restraint devices-asphyxia is a common finding. *Forensic Science International, 178*(2-3), 178-184.

Karlsson, S., Bucht, G., Rasmussen, B. H., & Sandman, P. O. (2000). Restraint use in elder care: Decision making among registered nurses. *Journal of Clinical Nursing, 9*(6), 842-850.

Keidan, I., Zaslansky, R., Weinberg, M., Ben-Shlush, A., Jacobson, J. M., Augarten, A. & Mor, Y. (2005). Sedation during voiding cystourethrography: Comparison of the efficacy and safety of using oral midazolam and continuous flow nitrous oxide. *Journal of Urology, 174*(4 pt.2), 1598-1600.

Kelly, A. & Dowling, M. (2004). Reducing the likelihood of falls in older people. *Nursing Standard, 18*(49), 33-40.

Khadivi, A. & Levine, J. M. (2005). Letter to editor re: Patient-focused care and seclusion…Sullivan et al. (2004), *11*(11), 503. *International Journal of Therapy & Rehabilitation, 12*(2), 88.

Kielb, C., Hurlock-Chorostecki, C., & Sipprell, D. (2005). Can minimal patient restraint be safely implemented in the intensive care unit? *Dynamics, 16*(1), 16-19.

Kier-York, J. E. (2000). Developing a special needs restraint loaner program for transporting medically fragile children. *Orthopaedic Nursing, 19*(6), 31-34.

Kirkevold, O., Sandvik, L., & Engedal, K. (2004). Use of constraints and their correlates in Norwegian nursing homes. *International Journal of Geriatric Psychiatry, 19*(10), 980-988.

Kirkevold, O. & Engedal, K. (2008). Quality of care in Norwegian nursing homes–deficiencies and their correlates. *Scandinavian Journal of Caring Sciences, 22*(4), 560-567.

Kirkevold, O., Laake, K., & Engedal, K. (2003). Use of constraints and surveillance in Norwegian wards for the elderly. *International Journal of Geriatric Psychiatry, 18*(6), 491-497.

Koch, S., Lyon, C., & Lyon, K. S. (2001). Case study approach to removing physical restraint. *International Journal of Nursing Practice, 7*(3), 156-161.

Koukia, E., Madianos, M. G., & Katostaras, T. (2009). "On the spot" interventions by mental health nurses in inpatient psychiatric wards in Greece. *Issues in Mental Health Nursing, 30*(5), 327-336.

Kozub, M. L. & Skidmore, R. (2001). Least to most restrictive interventions. A continuum for mental health care facilities. [Review]. *Journal of Psychosocial Nursing & Mental Health Services, 39*(3), 32-38.

Kraft, N. L. (2003). A pictorial and video guide to circumcision without pain. *Advances in Neonatal Care, 3,* 50-62.

Kunik, M. E., Lees, E., Snow, A. L., Cody, M., Rapp, C. G., Molinari, V. A., & Beck, C.K. (2003). Disruptive behavior in dementia: A qualitative study to promote understanding and improve treatment. *Alzheimer's Care Quarterly, 4*(2), 125-136.

Kurlowicz, L. H., Evans, L. K., Strumpf, N. E., & Maislin, G. (2002). A psychometric evaluation of the Cornell Scale for Depression in Dementia in a frail, nursing home population. *American Journal of Geriatric Psychiatry, 10*(5), 600-608.

Kuske, B., Luck, T., Hanns, S., Matschinger, H., Angermeyer, M. C., Behrens, J., & Riedel-Heller, S.G. (2009). Training in dementia care: A cluster-randomized controlled trial of a training program for nursing home staff in Germany. *International Psychogeriatrics, 21*(2), 295-308.

Kwasny, P., Hagen, B., & Armstrong-Esther, C. (2006). Use of major and minor tranquilizers with older patients in an acute care hospital: An exploratory study. *Journal of Advanced Nursing, 55*(2), 135-141.

Kwok, T., Mok, F., Chien, W. T., & Tam, E. (2006). Does access to bed-chair pressure sensors reduce physical restraint use in the rehabilitative care setting? *Journal of Clinical Nursing, 15*(5), 581-587.

Lacey, C. M., Finkelstein, M., & Thygeson, M. V. (2008). The impact of positioning on fear during immunizations: Supine versus sitting up. *Journal of Pediatric Nursing, 23*(3), 195-200.

Lai, C. K. Y., Kong, S. K. F., Chow, S. K. Y., Lee, J. C. S., & Lok, C. K. W. (2003). A restraint reduction program in a local old age home. *Asian Journal of Nursing Studies, 6*(2), 1-10.

Lai, C. K., Yeung, J. H., Mok, V., & Chi, I. (2009). Special care units for dementia individuals with behavioural problems. *Cochrane Database of Systematic Reviews, (4), CD006470.*

Laine, J., Finne-Soveri, U. H., Bjorkgren, M., Linna, M., Noro, A., & Hakkinen, U. (2005). The association between quality of care and technical efficiency in long-term care. *International Journal for Quality in Health Care, 17*(3), 259-267.

Laurin, D., Voyer, P., Verreault, R., & Durand, P. J. (2004). Physical restraint use among nursing home residents: A comparison of two data collection methods. *BMC Nursing, 3*(5).

Law, C. S. & Blain, S. (2003). Approaching the pediatric dental patient: A review of nonpharmacologic behavior management strategies. *Journal of the California Dental Association, 31*(9), 703-713.

Lebel, J., Stromberg, N., Duckworth, K., Kerzner, J., Goldstein, R., Weeks, M.,…Sudders, M. (2004). Child and adolescent inpatient restraint reduction: A state initiative to promote strength-based care. *Journal of the American Academy of Child and Adolescent Psychiatry, 43*(1), 37-45.

Lee, S., Gray, R., Gournay, K., Wright, S., Parr, A. M., & Sayer, J. (2003). Views of nursing staff on the use of physical restraint. *Journal of Psychiatric & Mental Health Nursing, 10*(4), 425-430.

Leggett, J. & Silvester, J. (2003). Care staff attributions for violent incidents involving male and female patients: A field study. *British Journal of Clinical Psychology, 42*(4), 393-406.

Lemonidou, C., Priami, M., Merkouris, A., Kalafati, M., Tafas, C., & Plati, C. (2002). Nurses' perceptions toward seclusion and use of restraints for psychiatric patients in Greece. *European Journal of Psychiatry, 16*(2), 81-90.

Lewis, M., Taylor, K., & Parks, J. (2009). Crisis prevention management: A program to reduce the use of seclusion and restraint in an inpatient mental health setting. *Issues in Mental Health Nursing, 30*(3), 159-164.

Lindgren, M., Unosson, M., Fredrikson, M., & Ek, A. C. (2004). Immobility – A major risk factor for development of pressure ulcers among adult hospitalized patients: A prospective study. *Scandinavian Journal of Caring Sciences, 18*(1), 57-64.

Lindsey, P. L. (2009). Psychiatric nurses' decision to restrain. *Journal of Psychosocial Nursing & Mental Health Services, 47*(9), 41-49.

Lin, L. C., Wu, S. C., Kao, C. C., Tzeng, Y. L., Watson, R., & Tang, S. H. (2009). Single ability among activities of daily living as a predictor of agitation. *Journal of Clinical Nursing, 18*(1), 117-123.

Lloyd, M., Urquhart, G., Heard, A., & Kroese, B. (2008). When a child says 'no': Experiences of nurses working with children having invasive procedures. *Paediatric Nursing, 20*(4), 29-34.

Lucero, M., Pearson, R., Hutchinson, S., Leger-Krall, S., & Rinalducci, E. (2001). Products for Alzheimer's self-stimulatory wanderers. *American Journal of Alzheimer's Disease & Other Dementias, 16*(1), 43-50.

Ludwick, R. & Zeller, R. A. (2001). The factorial survey: An experimental method to replicate real world problems. *Nursing Research, 50*(2), 129-133.

Lundy, H. & McGuffin, P. (2005). Using dance/movement therapy to augment the effectiveness of therapeutic holding with children. *Journal of Child & Adolescent Psychiatric Nursing, 18*(3), 135-145.

Maas, M. L., Specht, J. P., Buckwalter, K. C., Gittler, J., & Bechen, K. (2008). Nursing home staffing and training recommendations for promoting older adults' quality of care and life: Part 1. Deficits in the quality of care due to understaffing and undertraining. *Research in Gerontological Nursing, 1*(2), 123-133.

Mac Dermaid, L. & Byrne, C. (2006). Restraint reduction education. *Canadian Nursing Home, 17*(3), 10-14.

Malone, M. L., Vollbrecht, M., Stephenson, J., Burke, L., Pagel, P., & Goodwin, J. S. (2010). Acute Care for Elders (ACE) tracker and e-Geriatrician: Methods to disseminate ACE concepts to hospitals with no geriatricians on staff. *Journal of the American Geriatrics Society, 58*(1), 161-167.

Marangos-Frost, S. & Wells, D. (2000). Psychiatric nurses' thoughts and feelings about restraint use: A decision dilemma. *Journal of Advanced Nursing, 31*(2), 362-369.

Marcin, J. P., Rutan, E., Rapetti, P. M., Brown, J. P., Rahnamayi, R., & Pretzlaff, R. K. (2005). Nurse staffing and unplanned extubation in the pediatric intensive care unit. *Pediatric Critical Care Medicine, 6*(3), 254-257.

Marder, S. R. (2006). A review of agitation in mental illness: Treatment guidelines and current therapies. [Review]. *Journal of Clinical Psychiatry, 67,* (Suppl 10), 13-21.

Martin, B. & Mathisen, L. (2005). Use of physical restraints in adult critical care: A bicultural study. *American Journal of Critical Care, 14*(4), 133-142.

McCain, M. & Kornegay, K. (2005). Behavioral health restraint: The experience and beliefs of seasoned psychiatric nurses. *Journal for Nurses in Staff Development, 21*(5), 236-242.

McDougall, T. (2000). Violent incidents in a forensic adolescent unit: A functional analysis. *Journal of Research in Nursing, 5*(5), 346-363.

McGrath, P., Forrester, K., Fox-Young, S., & Huff, N. (2002). "Holding the child down" for treatment in paediatric haematology: The ethical, legal and practice implications. *Journal of Law & Medicine, 10*(1), 84-96.

Meyer, G., Kopke, B., Haastert, B.& Muhlhauser, I. (2008). Restraint use among nursing home residents : Cross-sectional study and prospective cohort study. *Journal of Clinical Nursing. 18*(7), 981-990.

Meyer, G., Kopke, S., Haastert, B., & Muhlhauser, I. (2009). Comparison of a fall risk assessment tool with nurses' judgement alone: A cluster-randomised controlled trial. *Age & Ageing, 38*(4), 417-423.

Mijares, A., Reyes, C., Robinson, A., Isip, H., & Coleman, B. (2007). Perceptions of intensive care nurses on conventional versus alternative measures to restraints: An exploratory pilot study. *American Journal of Critical Care, 16*(3), 305.

Miller, S. C., Papandonatos, G., Fennell, M., & Mor, V. (2006). Facility and county effects on racial differences in nursing home quality indicators. *Social Science & Medicine, 63*(12), 3046-3059.

Minnick, A. F., Fogg, L., Mion, L. C., Catrambone, C., & Johnson, M. E. (2007). Resource clusters and variation in physical restraint use. *Journal of Nursing Scholarship, 39*(4), 363-370.

Minnick, A. F. & Leipzig, R. M. (2001). The restraint match-up. Three lessons show how nurse leaders can influence the use of physical restraints. *Nursing Management, 32*(3), 37-39.

Minnick, A. F., Leipzig, R. M., & Johnson, M. E. (2001). Elderly patients' reports of physical restraint experiences in intensive care units. *American Journal of Critical Care, 10*(3), 168-171.

Mion, L. C., Fogel, J., Sandhu, S., Palmer, R. M., Minnick, A. F., Cranston, T.,…Leipsig, R. (2001). Outcomes following physical restraint reduction programs in two acute care hospitals. *Joint Commission Journal on Quality Improvement, 27*(11), 605-618.

Mion, L. C., Minnick, A. F., Leipzig, R. M., Catrambone, C. D., & Johnson, M. E. (2007). Patient-initiated device removal in intensive care units: A national prevalence study. *Critical Care Medicine, 35*(12), 2714-2720.

Möhler, R., Richter, T., Köpke, S., & Meyer, G. (2011). Interventions for preventing and reducing the use of physical restraints in long-term geriatric care. *Cochrane Database of Systematic Reviews* 2011, Issue 2, Art. No.:CD007546. DOI: 10.1002/14651858.CD007546.pub2

Mohr, W.K., Petti, T.A., & Mohr, B.D. (2003). Adverse effects associated with physical restraint. *Canadian Journal of Psychiatry – Revue Canadienne de Psychiatrie, 48*(5), 330-337.

Moore, K. & Haralambous, B. (2007). Barriers to reducing the use of restraints in residential elder care facilities. *Journal of Advanced Nursing, 58*(6), 532-540.

Moore, T., Hollett, J., Pilkington, F. B., & Jonas-Simpson, C. (2003). A pilot study of the lived experience for persons with dementia residing on a locked unit. *Perspectives, 27*(2), 5-14.

Moran, A., Cocoman, A., Scott, P. A., Matthews, A., Staniuliene, V., & Valimaki, M. (2009). Restraint and seclusion: A distressing treatment option? *Journal of Psychiatric & Mental Health Nursing, 16*(7), 599-605.

Morrison, E. F., Fox, S., Burger, S., Goodloe, L., Blosser, J., & Gitter, K. (2000). A nurse-led, unit-based program to reduce restraint use in acute care. *Journal of Nursing Care Quality, 14*(3), 72-80.

Morrison, E., Morman, G., Bonner, G., Taylor, C., Abraham, I., & Lathan, L. (2002). Reducing staff injuries and violence in a forensic psychiatric setting. *Archives of Psychiatric Nursing, 16*(3), 108-117.

Muir-Cochrane, E., Bowers, L., & Jeffery, D. (2009). Comparison in attitudes between nursing and other students in relation to containment measures for disturbed psychiatric patients. *Nurse Education Today, 29*(1), 83-90.

Mukamel, D. B., Glance, L. G., Li, Y., Weimer, D. L., Spector, W. D., Zinn, J. S., & Mosqueda, L. (2008). Does risk adjustment of the CMS quality measures for nursing homes matter? *Medical Care, 46*(5), 532-541.

Mullette, B. & Zulkowski, K. (2004). Bedrails: Restraints or enablers? *Ostomy Wound Management, 50*(8), 64-69

Murphy, B. A. (2000). Delirium. *Emergency Medicine Clinics of North America, 18*(2), 243-252.

Myers, H., Nikoletti, S., & Hill, A. (2001). Nurses' use of restraints and their attitudes toward restraint use and the elderly in an acute care setting. *Nursing & Health Sciences, 3*(1), 29-34.

Nawaz, H., Abbas, A., Sarfraz, A., Slade, M. D., Calvocoressi, L., Wild, D. M., & Tessier-Sherman, B. (2007). A randomized clinical trial to compare the use of safety net enclosures with standard restraints in agitated hospitalized patients. *Journal of Hospital Medicine 2*(6), 385-393.

Needham, I., Abderhalden, C., Dassen, T., Haug, H. J., & Fischer, J. E. (2002). Coercive procedures and facilities in Swiss psychiatry. *Swiss Medical Weekly, 132*(19-20), 253-258.

Norris III, J. S., Rogers, C., & Omery, A. (2005). "Acute care nursing: A naturalistic investigation of alternatives to restraint use in an acute care setting". *_16th International Nursing Research Congress Renew Nursing Through Scholarship_*, Hawaii Big Island.

Paavola, P. & Tiihonen, J. (2010). Seasonal variation of seclusion incidents from violent and suicidal acts in forensic psychiatric patients. *International Journal of Law and Psychiatry, 33*(1), 27-34.

Park, J. & Stearns, S. C. (2009). Effects of state minimum staffing standards on nursing home staffing and quality of care. *Health Services Research, 44*(1), 56-78.

Phillips, C. D., Spry, K. M., Sloane, P. D., & Hawes, C. (2000). Use of physical restraints and psychotropic medications in Alzheimer special care units in nursing homes. *American Journal of Public Health, 90*(1), 92-96.

Quadri, P., Tettamanti, M., Bernasconi, S., Trento, R., & Loew, F. (2005). Lower limb function as predictor of falls and loss of mobility with social repercussions one year after discharge among elderly inpatients. *Aging – Clinical and Experimental Research, 17*(2), 82-89.

Rabadi, M. H., Rabadi, F. M., & Peterson, M. (2008). An analysis of falls occurring in patients with stroke on an acute rehabilitation unit. *Rehabilitation Nursing, 33*(3), 104-109.

Raivio, M. M., Laurila, J. V., Strandberg, T. E., Tilvis, R. S., & Pitkala, K. H. (2007). Neither atypical nor conventional antipsychotics increase mortality or hospital admissions among elderly patients with dementia: A two-year prospective study. *American Journal of Geriatric Psychiatry, 15*(5), 416-424.

Rateau, M. R. (2000). Confusion and aggression in restrained elderly persons undergoing hip repair surgery. *Applied Nursing Research, 13*(1), 50-54.

Rausch, D. L. & Bjorklund, P. (2010). Decreasing the costs of constant observation. *Journal of Nursing Administration, 40*(2), 75-81.

Redman, B. A. & Fry, S. T. (2003). Ethics and human rights issues experienced by nurses in leadership roles. *Nursing Leadership Forum, 7*(4), 150-156.

Riley, D., Meehan, C., Whittington, R., Lancaster, G. A., & Lane, S. (2006). Patient restraint positions in a psychiatric inpatient service. *Nursing Times, 102*(3), 42-45.

Roberts, D., Crompton, D., Milligan, E., & Groves, A. (1950). Reflection on the use of seclusion: In an acute mental health facility. *Journal of Psychosocial Nursing & Mental Health Services, 47*(10), 25-31.

Ryan, C. J. & Bowers, L. (2005). Coercive manoeuvres in a psychiatric intensive care unit. *Journal of Psychiatric & Mental Health Nursing, 12*(6), 695-702.

Ryan, R. & Happell, B. (2009). Learning from experience: Using action research to discover consumer needs in post-seclusion debriefing. *International Journal of Mental Health Nursing, 18*(2), 100-107.

Saarnio, R. & Isola, A. (2009). Use of physical restraint in institutional elderly care in Finland: Perspectives of patients and their family members. *Research in Gerontological Nursing, 2*(4), 276-286.

Saloviita, T. (2002). Challenging behaviour, and staff responses to it, in residential environments for people with intellectual disability in Finland. *Journal of Intellectual and Developmental Disability, 27*(1), 21-30.

Sandvide, A., Fahlgren, S., Norberg, A., & Saveman, B. I. (2006). From perpetrator to victim in a violent situation in institutional care for elderly persons: Exploring a narrative from one involved care provider. *Nursing Inquiry, 13*(3), 194-202.

Schnelle, J. F., Bates-Jensen, B. M., Levy-Storms, L., Grbic, V., Yoshii, J., Cadogan, M., & Simmons, S.F. (2004). The minimum data set prevalence of restraint quality indicator: Does it reflect differences in care? *Gerontologist, 44*(2), 245-255.

Schofield, N. (2001). Psychiatric nurses expressed conflicting feelings in the decision to use physical restraints. *Evidence-Based Mental Health, 4*(1), 31.

Sees, D. L. (2009). Impact of the Health Care Financing Administration regulations on restraint and seclusion usage in the acute psychiatric setting. *Archives of Psychiatric Nursing, 23*(4), 277-282.

Sequeira, H. & Halstead, S. (2001). "Is it meant to hurt, is it?" Management of violence in women with developmental disabilities. *Violence Against Women, 7*(4), 462-476.

Shah, A., Chiu, E., & Ames, D. (2000). Aggressive behaviour and environmental characteristics in Australian nursing homes. *Aging and Mental Health, 4*(1), 43-47.

Shorr, R. I., Guillen, M. K., Rosenblatt, L. C., Walker, K., Caudle, C. E., & Kritchevsky, S. B. (2002). Restraint use, restraint orders, and the risk of falls in hospitalized patients. *Journal of the American Geriatrics Society, 50*(3), 526-529.

Sirin, S. R., Castle, N. G., & Smyer, M. (2002). Risk factors for physical restraint use in nursing homes: The impact of the Nursing Home Reform Act. *Research on Aging, 24*(5), 513-527.

Slettebo, A. & Bunch, E. H. (2004). Solving ethically difficult care situations in nursing homes. *Nursing Ethics, 11*(6), 543-552.

Sorrentino, A. (2004). Chemical restraints for the agitated, violent, or psychotic pediatric patient in the emergency department: Controversies and recommendations. *Current Opinion in Pediatrics, 16*(2), 201-205.

Souder, E. & O'Sullivan, P. (2003). Disruptive behaviors of older adults in an institutional setting. Staff time required to manage disruptions. *Journal of Gerontological Nursing, 29*(8), 31-36.

Sourial, R., McCusker, J., Cole, M., & Abrahamowicz, M. (2001). Agitation in demented patients in an acute care hospital: Prevalence, disruptiveness, and staff burden. *International Psychogeriatrics, 13*(2), 183-197.

Southcott, J. & Howard, A. (2007). Effectiveness and safety of restraint and breakaway techniques in a psychiatric intensive care unit. *Nursing Standard, 21*(6), 35-41.

Southcott, J., Howard, A., & Collins, E. (2002). Control and restraint training in acute mental health care. *Nursing Standard, 16*(27), 33-36.

Sparks, L. A., Setlik, J., & Luhman, J. (2007). Parental holding and positioning to decrease IV distress in young children: A randomized controlled trial. *Journal of Pediatric Nursing, 22*(6), 440-447.

Steinert, T., Eisele, F., Goeser, U., Tschoeke, S., Uhlmann, C., & Schmid, P. (2008). Successful interventions on an organizational level to reduce violence and coercive interventions in in-patients with adjustment disorders and personality disorders. *Clinical Practice and Epidemiology in Mental Health, 4*(27). Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2596103/?tool=pubmed

St. John, P. & Newton, L. (2001). Reasons for restraint discontinuation: A qualitative survey of nurses in a tertiary care teaching hospital. *Geriatrics Today: Journal of the Canadian Geriatrics Society, 4*(2), 125-129.

Stevenson, D. G. & Mor, V. (2009). Targeting nursing homes under the Quality Improvement Organization program's 9th statement of work. *Journal of the American Geriatrics Society, 57*(9), 1678-1684.

Stubbs, B. (2008). Injuries to staff from implementation of physical interventions: Could poor manual handling be at fault? *British Journal of Forensic Practice, 10*(4), 12-14.

Stubbs, B. (2009). Considering physical intervention as a manual handling procedure: Learning lessons from our general nursing colleagues. *British Journal of Forensic Practice, 11*(2), 32-37.

Stubbs, B. (2009). The manual handling of the aggressive patient: A review of the risk of injury to nurses. *Journal of Psychiatric & Mental Health Nursing, 16*(4), 395-400.

Stubbs, B. & Alderman, N. (2008). Physical interventions to manage patients with brain injury: An audit on its use and staff and patient injuries from the techniques. *Brain Injury, 22*(9), 691-696.

Stubbs, B., Leadbetter, D., Paterson, B., Yorston, G., Knight, C., & Davis, S. (2009). Physical intervention: A review of the literature on its use, staff and patient views, and the impact of training. *Journal of Psychiatric & Mental Health Nursing, 16*(1), 99-105.

Suen, L. K., Lai, C. K., Wong, T. K., Chow, S. K., Kong, S. K., Ho, J. Y.,…Wong, I.Y.C. (2006). Use of physical restraints in rehabilitation settings: Staff knowledge, attitudes and predictors. *Journal of Advanced Nursing, 55*(1), 20-28.

Sullivan, D., Wallis, M., & Lloyd, C. (2004). Effects of patient-focused care on seclusion in a psychiatric intensive care unit. *International Journal of Therapy Rehabilitation*, *11*(11), 503-508.

Talerico K. A. & Capezuti, E. (2001). Myths and facts about side rails. *American Journal of Nursing*. *101(7), 43-8.*

Talerico, K. A. & Evans, L. K. (2001). Responding to safety issues in frontotemporal dementias. [Review]. *Neurology, 56(*Suppl 4), S52-S55.

Talerico, K. A., Evans, L. K., & Strumpf, N. E. (2002). Mental health correlates of aggression in nursing home residents with dementia. *Gerontologist, 42*(2), 169-177.

Tamminga, R. Y. J., Armbrust, W., & Kamps, W. A. (2004). Midazolam compared with ketamine for invasive procedures. *Pediatric Hematology and Oncology, 21*(1), 93-94.

Taxis, J. C. (2002). Ethics and praxis: Alternative strategies to physical restraint and seclusion in a psychiatric setting. *Issues in Mental Health Nursing, 23*(2), 157-170.

Taylor, L. F., Whittington, F. J., Strasser, D. C., Hagan, H. C., Miller, S. W., & Archea, C. (2007). Gender differences in chemical restraint use in a nursing home: Patterns of psychotropic drug prescribing. *Journal of Aging and Pharmacotherapy, 13*(2), 67-81.

Taylor, L. F., Whittington, F., Strasser, D. C., Miller, S. W., Hennessy, C. H., & Archea, C. (2003). Psychotropic Drug Use in a Nursing Home: A 6-year retrospective. *Journal of Applied Gerontology, 22*(4), 474-489.

te Boekhorst, S., Depla, M. F. I. A., De, Lange, J., Pot, A. M., & Eefsting, J. A. (2009). The effects of group living homes on older people with dementia: A comparison with traditional nursing home care. *International Journal of Geriatric Psychiatry, 24*(9), 970-978.

Terpstra, T. L., Terpstra, T. L., Pettee, E. J., & Hunter, M. (2001). Nursing staff's attitudes toward seclusion & restraint. *Journal of Psychosocial Nursing & Mental Health Services, 39*(5), 20-28.

The University of Texas MD Anderson Cancer Center Restraints Improvement Group. (1999) Alternatives for physical restraint: Myths and truths about physical restraints. Including a nursing survey on restraint practices. *The Internet Journal of Advanced Nursing Practice, 3*(1).

Turner, J. T., Lee, V., Fletcher, K., Hudson, K., & Barton, D. (2001). Measuring quality of care with an inpatient elderly population. The geriatric resource nurse model. *Journal of Gerontological Nursing, 27*(3), 8-18.

Tzeng, H. M. & Yin, C. Y. (2008). Heights of occupied patient beds: A possible risk factor for inpatient falls. *Journal of Clinical Nursing, 17*(11), 1503-1509.

Van Citters, A. D., Naidoo, U., & Foti, M. E. (2007). Using a hypothetical scenario to inform psychiatric advance directives. *Psychiatric Services, 58*(11), 1467-1471.

van Doeselaar, M., Sleegers, P., & Hutschemaekers, G. (2008). Professionals' attitudes toward reducing restraint: The case of seclusion in the Netherlands. *Psychiatric Quarterly, 79*(2), 97-109.

Van Rompaey, B., Elseviers, M. M., Schuurmans, M. J., Shortridge-Baggett, L. M., Truijen, S., & Bossaert, L. (2009). Risk factors for delirium in intensive care patients: A prospective cohort study. *Critical Care, 13*(3), R77. Doi: 10.1186/cc7892

Vassallo, M., Wilkinson, C., Stockdale, R., Malik, N., Baker, R., & Allen, S. (2005). Attitudes to restraint for the prevention of falls in hospital. *Gerontology, 51*(1), 66-70.

Vatne, S. & Fagermoen, M. S. (2007). To correct and to acknowledge: Two simultaneous and conflicting perspectives of limit-setting in mental health nursing. *Journal of Psychiatric & Mental Health Nursing, 14*(1), 41-48.

Vittengl, J. R. (2002). Temporal regularities in physical control at a state psychiatric hospital. *Archives of Psychiatric Nursing, 16*(2), 80-85.

Wallsten, T., Kjellin, L., & Sjoberg, R. L. (2008). The diagnostic accuracy of questions about past experiences of being mechanically restrained in a population of psychiatric patients. *Memory, 16*(5), 548-555.

Wan, T. T., Zhang, N. J., & Unruh, L. (2006). Predictors of resident outcome improvement in nursing homes. *Western Journal of Nursing Research, 28*(8), 974-993.

Wang, W. W. & Moyle, W. (2005). Physical restraint use on people with dementia: A review of the literature. [Review]. *Australian Journal of Advanced Nursing, 22*(4), 46-52.

Weiner, C., Tabak, N., & Bergman, R. (2003). The use of physical restraints for patients suffering from dementia. *Nursing Ethics, 10*(5), 512-525.

Weiner, C., Tabak, N., & Bergman, R. (2003). Use of restraints on dementia patients: An ethical dilemma of a nursing staff in Israel. *JONA's Healthcare Law, Ethics, & Regulation, 5*(4), 87-93.

Weintraub, D. & Spurlock, M. (2002). Change in the rate of restraint use and falls on a psychogeriatric inpatient unit: Impact of the Health Care Financing Administration's new restraint and seclusion standards for hospitals. *Journal of Geriatric Psychiatry and Neurology, 15*(2), 91-94.

Wen, V., Mauceri, J., Smith, O., & Wilson, G. (2008). Least restraint or not: An observational study on the prevalence of physical restraint use in intensive care. *Dynamics, 19*, 43-44.

Werner, P. & Mendelsson, G. (2001). Nursing staff members' intentions to use physical restraints with older people: Testing the theory of reasoned action. *Journal of Advanced Nursing, 35*(5), 784-791.

Werner, P. (2008). Discriminatory behavior towards a person with Alzheimer's disease: Examining the effects of being in a nursing home. *Aging & Mental Health, 12*(6), 786-794.

Weze, C., Leathard, H. L., Grange, J., Tiplady, P., & Stevens, G. (2005). Evaluation of healing by gentle touch. *Public Health, 119*(1), 3-10.

Whitehead, E. & Mason, T. (2006). Assessment of risk and special observations in mental health practice: A comparison of forensic and non-forensic settings. *International Journal of Mental Health Nursing, 15*(4), 235-241.

Whitman, G. R., Davidson, L. J., Sereika, S. M., & Rudy, E. B. (2001). Staffing and pattern of mechanical restraint use across a multiple hospital system. *Nursing Research, 50*(6), 356-362.

Whitman, G. R., Kim, Y., Davidson, L. J., Wolf, G. A., & Wang, S. L. (2002). The impact of staffing on patient outcomes across specialty units. *Journal of Nursing Administration, 32*(12), 633-639.

Whitman, G. R., Kim, Y., Davidson, L. J., Wolf, G. A., & Wang, S. L. (2007). Measuring nurse-sensitive patient outcomes across specialty units. *Outcomes Management, 6*(4), 152-158.

Whittington, R., Bowers, L., Nolan, P., Simpson, A., & Neil, L. (2009). Approval ratings of inpatient coercive interventions in a national sample of mental health service users and staff in England. *Psychiatric Services, 60*(6), 792-798.

Whittington, R., Lancaster, G., Meehan, C., Lane, S., & Riley, D. (2006). Physical restraint of patients in acute mental health care settings: Patient, staff, and environmental factors associated with the use of a horizontal restraint position. *Journal of Forensic Psychiatry and Psychology, 17*(2), 253-265.

Wille, R. T., Barnett, J. L., Chey, W. D., Scheiman, J. M., & Elta, G. H. (2000). Routine droperidol pre-medication improves sedation for ERCP. *Gastrointestinal Endoscopy, 52*(3), 362-366.

Williams, J. (2008). Exploring ethically sensitive decision-making in acute hospital care: Using hand-control mittens in adult patients. *Developing Practice Improving Care, 4*(4), 1-4.

Williams, J. E. & Myers, R. E. (2001). Relationship of less restrictive interventions with seclusion/restraints usage, average years of psychiatric experience and staff mix. *Journal of the American Psychiatric Nurses Association, 7*(5), 139-144.

Wright, S., Sayer, J., Parr, A. M., Gray, R., Southern, D., & Gournay, K. (2005). Breakaway and physical restraint techniques in acute psychiatric nursing: Results from a national survey of training and practice. *Journal of Forensic Psychiatry and Psychology, 16*(2), 380-398.

Wynaden, D., Orb, A., McGowan, S., Castle, D., Zeeman, Z., Headford, C.,…Finn, M. (2001). The use of seclusion in the year 2000: What has changed? *Collegian: Journal of the Royal College of Nursing, Australia, 8*(3), 19-25.

Wynn, R. (2002). Medicate, restrain or seclude? Strategies for dealing with violent and threatening behaviour in a Norwegian university psychiatric hospital. *Scandinavian Journal of Caring Sciences, 16*(3), 287-291.

Wynn, R. (2003). Staff's attitudes to the use of restraint and seclusion in a Norwegian university psychiatric hospital. *Nordic Journal of Psychiatry, 57*(6), 453-459.

Yan, E., Kwok, T., Lee, D., & Tang, C. (2009). The prevalence and correlates of the use of restraint and force on hospitalized older people. *Journal of Nursing & Healthcare of Chronic Illnesses, 1*(2), 147-155.

Yamagishi, M., Kanda, K., & Takemura, Y. (2003). Methods developed to elucidate nursing related adverse events in Japan. *Journal of Nursing Management, 11*(3), 168-176.

Yamamoto, M. & Aso, Y. (2009). Placing physical restraints on older people with dementia. *Nursing Ethics, 16*(2), 192-202.

Yeh, S. H., Lin, L. W., & Lo, S. K. (2003). A longitudinal evaluation of nursing home care quality in Taiwan. *Journal of Nursing Care Quality, 18*(3), 209-216.

Yeh, S. H., Hsiao, C. Y., Ho, T. H., Chiang, M. C., Lin, L. W., Hsu, C. Y., & Shu-Yuanm, L. (2004). The effects of continuing education in restraint reduction on novice nurses in intensive care units. *Journal of Nursing Research, 12*(3), 246-256.

Yeh, S. H., Lee, L. N., Ho, T. H., Chiang, M. C., & Lin, L. W. (2004). Implications of nursing care in the occurrence and consequences of unplanned extubation in adult intensive care units. *International Journal of Nursing Studies, 41*(3), 255-262.

Yung, M. (2005). "The related factors of the patient with endotracheal tube unplanned extubation in the ICU". ". *_16th International Nursing Research Congress Renew Nursing Through Scholarship_*, Hawaii Big Island.

Zhang, N. J., Unruh, L., Liu, R., & Wan, T. T. (1993). Minimum nurse staffing ratios for nursing homes. *Nursing Economics, 24*(2), 78-85.

Zhang, X. & Grabowski, D. C. (2004). Nursing home staffing and quality under the nursing home reform act. *Gerontologist, 44*(1), 13-23.

Zinn, J., Spector, W., Hsieh, L., & Mukamel, D. B. (2005). Do trends in the reporting of quality measures on the nursing home compare web site differ by nursing home characteristics? *Gerontologist, 45*(6), 720-730.

Zuidema, S., Koopmans, R., & Verhey, F. (2007). Prevalence and predictors of neuropsychiatric symptoms in cognitively impaired nursing home patients. *Journal of Geriatric Psychiatry & Neurology, 20*(1), 41-49.

Zun, L. S. (2003). A prospective study of the complication rate of use of patient restraint in the emergency department. *Journal of Emergency Medicine, 24*(2), 119-124.

Zun, L. S. & Downey, L. (2005). The use of seclusion in emergency medicine. *General Hospital Psychiatry, 27*(5), 365-371.

Appendix A: Glossary of Terms

Term: Definition/Source
Actions Taken to Reduce Risk: Actions taken to reduce, manage or control any future harm, or probability of harm, associated with an incident (World Health Organization [WHO], 2009).
Activities of Daily Living: Activities of Daily Living (ADL) is used in rehabilitation as an umbrella term relating to self care, comprising those activities or tasks that people undertake routinely in their everyday life. The activities can be subdivided into personal care or Basic ADL (BADL) and domestic and community activities – Instrumental ADL (IADL). BADL is typically restricted to activities involving functional mobility (ambulation, wheelchair mobility, bed mobility and transfers) and personal care (feeding, hygiene, toileting, bathing and dressing). IADL functions are concerned with a person's ability to cope with her/his environment in terms of such adaptive tasks as shopping, cooking, housekeeping, laundry, use of transportation, managing money, managing medication and the use of the telephone (Fricke, 2011).
Behaviour Management Programs: Behaviour management programs incorporate individualized patient management plans, early detection and prevention, staff training, reinforcement of appropriate behaviours, and intervention using the least restrictive option and are used in patients with challenging behaviours. Individualized patient management plans are created to focus on the treatment goals for an admission and to prevent or manage challenging behaviours based on known triggers. Programs can provide logical and predictable consequences for potential challenging behaviours and include: • use of cognitive-behavioural techniques such as, anger management programs; • skills training to help the client identify problems or conflict; and • use of modeling and problem-solving training to assist clients to recognize internal emotional states, identify precipitating factors and develop self-control strategies that can increase their repertoire of response options. The principle of such programs is to reinforce appropriate behaviours and extinguish disruptive and potentially dangerous behaviours. Challenging behaviours are managed using a hierarchy of interventions from least restrictive options to use of restraints as last resort and include engaging the patient about behaviour choices such as using quiet time, time-out in a designated room (open or closed), or seclusion (Dean et al., 2007).
Circumstance: A situation or factor that may influence an event, agent or person(s) (WHO, 2009, pg. 22).
Client: A client may be an individual (patient, resident, consumer, family/SDM, group or community (CNO, rev. 2009d; Mental Health Commission of Canada, 2009).
Client-Centred Care: An approach in which clients are viewed as whole; it is not merely about delivering services where the client is located. Client centred care involves advocacy, empowerment, and respecting the client's autonomy, voice, self-determination, and participation in decision-making (RNAO, rev. 2006).
Clinical Practice Guidelines or Best Practice Guidelines: Systematically developed statements to assist practitioner and client decisions about appropriate health care for specific clinical (practice) circumstances (Field & Lohr, 1990).
Complication: A disease or injury that arises subsequent to another disease and/or health care intervention (Canadian Patient Safety Institute [CPSI], 2003).
Contributing Factor: A circumstance, action or influence that is thought to have played a part in the origin or development of an incident or to increase the risk of an incident (WHO, 2009).

Consensus: A process for making policy decisions, not a scientific method for creating new knowledge. Consensus development makes the best use of available information, be that scientific data or the collective wisdom of the participants (Black et al.,1999).

Crisis Management: A process that focuses on resolution of the immediate problem through the use of personal, social and environmental resources. The goals of crisis intervention are rapid resolution of the crisis to prevent further deterioration, to achieve at least a pre-crisis level of functioning, to promote growth and effective problem solving, and to recognize danger signs to prevent negative outcomes (RNAO, rev. 2006b).

Culture: Culture refers to the shared and learned values, beliefs, norms and ways of life of an individual or a group. It influences thinking, decisions and actions (CNO, rev. 2009d).

De-escalation: A complex range of skills designed to abort the assault cycle during the escalation phase, including both verbal and non-verbal communication skills (NCCNSC, 2005).

Education Recommendations: Statements of educational requirements and educational approaches/strategies for the introduction, implementation and sustainability of the best practice guideline.

Elopement: Elopement is "a dependent resident leaving a facility without observation or knowledge of departure and under circumstances that place the resident's health, safety, or welfare at risk" (Bennet, 2008).

Evidence: Evidence is information that comes closest to the facts of a matter. The form it takes depends on context. The findings of high-quality, methodologically appropriate research provide the most accurate evidence. Because research is often incomplete and sometimes contradictory or unavailable, other kinds of information are necessary supplements to, or stand-ins for research. The evidence-base for a decision is the multiple forms of evidence combined to balance rigor with expedience while privileging the former over the latter (Canadian Health Services Research Foundation, 2006).

Harm: The impairment of structure or function of the body and/or any deleterious effect arising there from, including disease, injury, suffering, disability and death, and may be physical, social or psychological. *Disease* is a physiological or psychological dysfunction. *Injury* is damage to tissues caused by an agent or event and suffering is the experience of anything subjectively unpleasant. *Suffering* includes pain, malaise, nausea, depression, agitation, alarm, fear and grief. *Disability* implies any type of impairment of body structure or function, activity limitation and/or restriction of participation in society, associated with past or present harm (WHO, 2009).

Harmful Incident: Previously known as adverse event: an incident that resulted in harm to a patient (WHO, 2009).

Heath Care-Associated Harm: Harm arising from, or associated with, plans or actions taken during the provision of health care, rather than an underlying disease or injury (WHO, 2009).

Informed Consent: Agreement to a health care treatment given by a capable person who is able to understand and appreciate the nature and consequences of the proposed treatment. If a person is incapable of giving consent, a proxy or substitute decision-maker may give consent in their place. Unless there is an emergency such that informed consent cannot be obtained, full and informed consent is the standard required for any health care treatment. The option of no treatment is specified as a possibility for informed consent in some legislation (Health Canada, 2006).

Interprofessional Care: Refers to the provision of comprehensive health services to patients by multiple health caregivers who work collaboratively to deliver quality care within and across settings (Interprofessional Care Steering Committee, 2007).

Organization and Policy Recommendations: Statements of conditions required for a practice setting that enables the successful implementation of the best practice guideline. The conditions for success are largely the responsibility of the organization, although they may have implications for policy at a broader government or societal level.

Patient (Client) Safety: The reduction of risk of unnecessary harm associated with health care to an acceptable minimum (WHO, 2009).

Patient (Client) Safety Incident: An event or circumstance that could have resulted, or did result, in unnecessary harm to a patient (WHO, 2009).

Personal assistance service devices (PASDs): A device used to assist a person with a routine activity of living, used only if the use of the PASD is included in resident's plan of care.

Inclusion in plan of care

The use of a PASD to assist a resident with a routine activity of living may be included in a resident's plan of care only if all of the following are satisfied:

1. Alternatives to the use of a PASD have been considered, and tried where appropriate, but would not be, or have not been, effective to assist the resident with the routine activity of living.
2. The use of the PASD is reasonable, in light of the resident's physical and mental condition and personal history, and is the least restrictive of such reasonable PASDs that would be effective to assist the resident with the routine activity of living.
3. The use of the PASD has been approved by,
    i. a physician,
    ii. a registered nurse,
    iii. a registered practical nurse,
    iv. a member of the College of Occupational Therapists of Ontario,
    v. a member of the College of Physiotherapists of Ontario, or
    vi. any other person provided for in the regulations.
4. The use of the PASD has been consented to by the resident or, if the resident is incapable, a substitute decision-maker of the resident with authority to give that consent.
5. The plan of care provides for everything required under the legislation (Ministry of Health and Long Term Care, 2007).

Personhood: A standing or status that is bestowed upon one human being by others, in the context of the relationship and social being. It implies recognition, respect and trust (Kitwood, 1997).

Practice Recommendations: Statements of best practice directed at the practice of health-care professionals that are ideally evidence-based.

Precipitating (Risk Factor): An element that causes or contributes to the occurrence of a disorder (Mosby's Medical Dictionary, 8th edition, 2009).

Predisposing (Risk Factor): Factors that an increase vulnerability to a particular disease based on genetic factors or the existence of certain underlying conditions not yet active or revealed (Mosby's Dental Dictionary, 2nd edition, 2008).

Preventable: Accepted by the community as avoidable in the particular set of circumstances (WHO, 2009).

Quality: The degrees to which health-care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge (WHO, 2009).

Mitigating Factors: An action or circumstance that prevents or moderates the progression of an incident towards harming a patient (WHO, 2009).

Randomized Controlled Trials: Clinical trials that involve at least one test treatment and one control treatment, concurrent enrolment and follow-up of the test- and control-treated groups, and in which the treatments to be administered are selected by a random process.

Rapid Response Team: Team members from psychiatric care areas that use physical restraints consisting of:

- Medical Director or Assistant Medical Director,
- Clinical Supervisor, and
- Nurse Manager of service area where restraining of client occurred.

Rapid response team is activated within 24 hours of restraining episode and will meet for any incidence of mechanical restraint with the client's attending physician, unit/area charge nurse, and Master's level nurse working with client to address the question: What can be done to decrease the likelihood that additional restraining episodes will occur with this client? (Prescott et al., 2007),

Responsive Behaviours: Responsive behaviours means behaviours that often indicate:

(a) An unmet need in a person, whether cognitive, physical, emotional, social, environmental or other, or

(b) A response to circumstances within the social or physical environment that may be frustrating, frightening or confusing to a person (Ministry of Health and Long Term Care, 2007),

Restraints: Restraints are physical, chemical or environmental measures used to control the physical or behavioural activity of a person or a portion of his/her body. Physical restraints limit a client's movement. Physical restraints include a table fixed to a chair or a bed rail that cannot be opened by the client. Environmental restraints control a client's mobility. Examples include a secure unit or garden, seclusion or a time-out room. Chemical restraints are any form of psychoactive medication used not to treat illness, but to intentionally inhibit a particular behaviour or movement. Least restraint means all possible alternative interventions are exhausted before deciding to use a restraint and the least restrictive form of restraint to meet the client's needs should be used (CNO, rev. 2009c).

Risk: The probability that an incident will occur (WHO, 2009).

Risk Factor: A factor that causes a person or a group of people to be particularly susceptible to an unwanted, unpleasant, or unhealthy event, such as immunosuppression, which increases the incidence and severity of infection, or cigarette smoking, which increases the risk of developing a respiratory or cardiovascular disease (Mosby's Medical Dictionary, 8th edition, 2009).

Safety Plans: Freedom from accidental injury ensuring patient safety involves the establishment of operational systems and processes (safety plan) that minimize the likelihood of intercepting them when they occur (Kohn, Corrigan & Donaldson, 2000).

Seclusion: The restriction of a person's mobility through physically confining the patient to a defined area. Seclusion, an environmental restraint, has been defined as the involuntary confinement of a patient alone in a room or area from which the patient is physically prevented from leaving (National Council for Community Behavioural Healthcare, 2007).

Siderails: Siderails/Bed rails are adjustable metal or rigid plastic bars that attach to the bed and are available in a variety of shapes and sizes from full to half, one-quarter, and one-eighth in lengths. In the spectrum of care – including hospital, long term care and home care settings – bed rails serve a variety of purposes, some of which are in the best interest of the patient's health and safety. Bed rails:

- are used on stretchers or beds while transporting patients following surgery or when relocating a patient to a new room or unit;
- can facilitate turning and repositioning within the bed or transferring in or out of a bed;
- may provide a feeling of comfort and security, or facilitate access to bed controls; and
- may be used as a physical barrier to remind the patient of the bed perimeters, to ask for nursing assistance, or to restrict voluntary movement out of bed (Hospital Bed Safety Workgroup, 2003).

Significant Other: A significant other may include, but is not limited to, the person who a client identifies as the most important in his/her life. It could be a spouse, partner, parent, child, sibling or friend (CNO, 2009c).

Stakeholder: An individual, group, or organization with a vested interest in the decisions and actions of organizations that may attempt to influence decisions and actions (Baker et al., 1999). Stakeholders include all individuals or groups who will be directly or indirectly affected by the change or solution to the problem.

Substitute Decision Maker (SDM): A person identified by the Ministry of Health and Long-Term Care: Health Care Consent Act, 1996 (HCCA) who may make a treatment decision for someone who is incapable of making his/her own decision. The HCCA provides a hierarchy to determine who is eligible to be a substitute decision-maker. The SDM is usually a spouse, partner or relative. A power of attorney for personal care is not necessarily required to act as SDM (CNO, rev. 2009a).

Systematic Review: An application of a rigorous scientific approach to the preparation of a review article (National Health and Medical Research Centre, 1998). Systematic reviews establish where the effects of health care are consistent and research results can be applied across populations, settings, and differences in treatment (e.g. dose); and where effects may vary significantly. The use of explicit, systematic methods in reviews limits bias (systematic errors) and reduces chance effects, thus providing more reliable results upon which to draw conclusions and make decisions (Higgins & Green, 2008).

Therapeutic Relationship: The therapeutic relationship is grounded in an interpersonal process that occurs between the nurse and the client(s). Therapeutic relationship is a purposeful, goal-directed relationship that is directed at advancing the best interest and outcome of the client (RNAO, rev. 2006c).

Trauma Informed Care: Mental health treatment that is directed by a thorough understanding by leaders and staff of the profound neurological, biological, psychological and social effects of trauma and violence on the individual human being, and an appreciation for the high prevalence of traumatic experiences in persons who receive mental health services (National Executive Training Institute, 2005).

Treatment Interference: Treatment interference refers to the self-removal or disruption of technological devices used for diagnosis, treatment, physiologic monitoring of acute and critically ill patients. Interference can apply to the disruption or self-removal of any device, including urinary catheters, intravascular lines, feeding tubes, pulse oximetry probes and oxygen masks (Happ, 2000).

Appendix B: Guideline Development Process

The RNAO, with funding from the Government of Ontario, has embarked on a multi-year program of nursing best practice guideline development, pilot implementation, evaluation, dissemination and support of uptake. One of the areas of emphasis is on nursing interventions related to client safety and the use of restraints. A panel of nurses and other health-care professionals convened by the RNAO developed this guideline. This work was conducted independent of any bias or influence from the Ontario Government.

In April of 2010, a panel of nurses and health-care professionals from a range of practice settings with expertise in practice, education and research with clients at risk of behaviours of harm to self/others resulting in the possible use of restraints was convened under the auspices of the RNAO. The panel discussed the purpose of their work, and came to consensus on the scope of this best practice guideline. It was the consensus of the guideline development panel that the use of a model in tandem with guiding principles (Figure 1, pg. 20-21) along with the development of the following seven clinical questions was a critical to the development of guideline recommendations:

1. What ***assessment approaches and tools are available*** to assist nurses to identify clients at risk for restraint use?
2. What ***prevention strategies and tools*** are available to support nurses to care for clients at risk for restraint use?
3. What ***de-escalation and crisis management*** techniques are available to support nurses to care for clients at risk for restraint use?
4. What ***safety and monitoring strategies*** does the nurse need to consider ***when restraints are considered as a last intervention***?
5. What ***education and training is required to support nurses*** in the implementation of alternative approaches and/or the use of restraints when caring for clients at risk for restraint use?
6. What ***organizational characteristics*** support nurses across all practice settings to move towards a restraint-free practice environment?
7. What ***studies are available on environments conducive to restraint-free practices***?

Subsequently, a search of the literature for best practice guidelines, systematic reviews, relevant research studies and websites was conducted. Nineteen existing best practice guidelines on the topic were found. As part of the rigorous guideline development process for the Nursing Best Practice Guidelines Program, a systematic review of the literature was conducted. The search strategy of the research literature resulted in the retrieval of more than 1308 abstracts on the topic of restraints. See Appendix C for details of the Systematic Review and search strategy and outcomes.

The panel was divided into expert subgroups by area of clinical and academic expertise and interest to consider the evidence summaries according to the clinical questions for thematic analysis for the purpose of drafting recommendations for the guideline. The subgroups linked the evidence (ranging from randomized controlled trials to grey literature) to themes that formed the basis for the development of the recommendations. Through consensus process panel subgroups, based on answering the seven clinical questions, developed major recommendation themes. The guideline recommendations were then brought back to the whole panel for consensus and approval. This process resulted in the development of practice, education and organization and policy recommendations. The panel members as a whole reviewed the draft recommendations, discussed gaps, reviewed the evidence and came to consensus on the final set of recommendations. The document was further refined to readily support clinical practice.

Recognizing the importance of collaboration across disciplines in practice settings, a subsequent draft was submitted to a set of external stakeholders for review and feedback – an acknowledgement of these reviewers is provided on page 11-16 of this document. Stakeholders represented various health-care professional and advocacy groups, clients/families/SDMs, as well as professional associations. External stakeholders were provided with specific questions for comment, as well as the opportunity to give overall feedback and general impressions. The feedback from stakeholders was compiled and reviewed by the development panel discussion and consensus resulted in revisions to the draft document prior to publication.

Appendix C: Process for Systematic Review

The search strategy utilized during the development of this guideline focused on two key areas: a structured website search to identify best practice guidelines published on the topic of restraints no earlier than January, 2005; and a literature review to identify primary studies, meta-analyses and systematic reviews published in this area from January 2000 to April 2010.

Step 1: Guideline Search

One individual searched an established list of websites for content related to the topic area in January 2009. This list of sites was compiled based on existing knowledge of evidence-based practice websites, known guideline developers and recommendations from the literature. Presence or absence of guidelines was noted for each site searched as well as date searched. The websites at times did not house guidelines, but directed to another website or source for guideline retrieval. Guidelines were either downloaded if full versions were available or were ordered by phone/email.

- Agency for Healthcare Research and Quality (National Guideline Clearinghouse): http://www.guidelines.gov/
- Alberta Medical Association: http://www.topalbertadoctors.org/
- American College of Critical Care Medicine of the Society of Critical Care Medicine: http://www.med.umich.edu/AnesCriticalCare/Documents/Guidelines/SCCM/restraint.pdf
- Bandolier Journal: http://www.medicine.ox.ac.uk/bandolier/
- Brent Local Safeguarding Children Board (LSCB): http://www.brentlscb.org.uk/
- British Columbia Council on Clinical Practice Guidelines: http://www.bcguidelines.ca/gpac/
- British Columbia Office of Health Technology Assessment: http://www.chspr.ubc.ca/
- Campbell Collaboration: http://www.campbellcollaboration.org/
- Canadian Coordinating Office for Health Technology Assessment (CCOHTA): http://cadth.ca/
- Canadian Health Network: http://www.phac-aspc.gc.ca/chn-rcs/index-eng.php
- Canadian Institute for Health Information: http://secure.cihi.ca/cihiweb/splash.html
- Canadian Medical Association Infobase: Clinical Practice Guidelines: http://www.cma.ca/index.php/ci_id/54316/la_id/1.htm
- Centers for Disease Control and Prevention: http://www.cdc.gov/
- Centers for Evidence-Based Mental Health: http://cebmh.com/
- Centre for Evidence-Based Pharmacotherapy: http://rodp.ridne.net/node-54615.html
- Children Acts Advisory Board: http://www.srsb.ie/
- Clinical Evidence: http://clinicalevidence.bmj.com/ceweb/conditions/index.jsp
- College of Nurses of Ontario: Standards: http://www.cno.org/en/learn-about-standards-guidelines/publications-list/standards-and-guidelines/
- Commission on the Future of Health Care in Canada: http://www.hc-sc.gc.ca/index-eng.php
- Database of Abstracts of Reviews of Effectiveness (DARE): http://www.crd.york.ac.uk/crdweb/
- Emergency Medical Services Guidelines: http://wearcam.org/decon/full_body_restraint.htm
- Evidence-based On-Call: http://www.eboncall.org/
- European Observatory on Health Care for Chronic Conditions World Health Organization: http://www.who.int/chp/en/
- Geriatric Nursing Resource: http://aappolicy.aappublications.org/cgi/reprint/pediatrics;119/5/1018.pdf
- Guidelines Advisory Committee: http://www.gacguidelines.ca/index.cfm?pagepath=Resource_Centre/GAC_Publications&id=18876
- Health Care Association of New Jersey: http://www.hcanj.org/docs/hcanjbp_fallmgmt6.pdf
- Institute for Clinical Evaluative Sciences: www.ices.on.ca
- Institute for Clinical Systems Improvement: http://www.icsi.org/guidelines_and_more/
- Irish Nurses Association: Guidelines on the Use of Restraint in Care of the Older Person: http://www.inmo.ie/DesktopModules/articles/Documents/Guidelinesonrestraint.pdf

- Joanna Briggs Institute for Evidence Based Nursing & Midwifery (Australia): http://www.joannabriggs.edu.au/
- Monash University Centre for Clinical Effectiveness: http://www.med.monash.edu.au/centres-institutes.html
- National Health Service Centre for Reviews and Dissemination: http://www.york.ac.uk/inst/crd/
- National Health Service R & D Health Technology Assessment Programme: http://www.ncbi.nlm.nih.gov/books/NBK16710/
- National Institute for Clinical Evidence (NICE): http://www.nice.org.uk/guidance/index.jsp
- National Institute of Health (US) Consensus Development Program: http://consensus.nih.gov/
- New Zealand Guidelines Group: http://www.nzgg.org.nz/
- Psychiatry Online: http://www.psychiatryonline.com/resourceTOC.aspx?resourceID=5
- The Physiotherapy Evidence Database: http://www.pedro.org.au/
- Registered Nurses' Association of Ontario, Nursing Best Practice Guidelines: www.rnao.org/bestpractices
- The Royal Children's Hospital Melbourne Clinical Practice Guideline: http://www.rch.org.au/clinicalguide/cpg.cfm?doc_id=5243
- Royal College of Nursing: http://www.rcn.org.uk/
- Scottish Intercollegiate Guidelines Network: www.sign.ac.uk
- Virginia Henderson International Nursing Library: http://www.nursinglibrary.org/vhl/

Step 2: Search Engine Web Search

In addition, a website search for existing practice guidelines on the topic of restraints was conducted via the search engine "Google", using key search terms. One individual conducted this search noting the result of the search, the websites reviewed, date and a summary of results. The result of the search was then integrated into the established list of guideline websites for content related to the topic.

Step 3: Hand Search/Panel Contributions

Panel members were also asked to review personal archives to identify guidelines not previously found through the above search strategies. Identified guidelines by panel members where checked against the established list from guideline websites and integrated into the list of guidelines if they had not already been identified in the search and met the inclusion criteria.

The search strategies described above resulted in the retrieval of 19 guidelines on the topic of restraints that met the following criteria:

1. Published in English, national and international in scope;
2. Developed no earlier than January, 2005;
3. Strictly on the topic areas listed below;
4. Evidence-based (contains references, description of evidence, source of evidence); and
5. Available and accessible for retrieval.

As part of the evidence review, the guideline development panel conducted a critical appraisal of the 19 retrieved existing clinical guidelines related to the use of restraints, using the Appraisal of Guidelines for Research and Evaluation Instrument II (Brouwers, et al., 2010). This process resulted in the decision that 10 of these guidelines were relevant to the scope of the guideline to be developed and would be used to inform the panel when developing the recommendations with supporting discussions of evidence. The 10 included guidelines were:

- College of Nurses of Ontario (CNO). (rev. 2009c). *Restraints standard.* Toronto (ON): College of Nurses of Ontario.
- Futrell, M., Melillo, K. D. & Remington, R. (2008). *Evidence-based practice guideline. Wandering.* Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Translation Dissemination Core.
- Institute for Clinical Systems Improvement (ICSI). (2008). *Prevention of falls (acute care). Health care protocol.* Bloomington (MN): Institute for Clinical Systems Improvement.
- Lyons, S. S. (2004). *Fall prevention for older adults: Evidence-based protocol.* Iowa City, Iowa: The University of Iowa Gerontological Nursing Interventions Research Center Research Translation and Dissemination Core.

- McGongal-Kenney, M. L. & Schutte, D. L. (2004). *Non-pharmacological management of agitated behaviours in persons with Alzheimer Disease and other chronic dementing conditions.* University of Iowa Gerontological Nursing Interventions Research Center Research Translation and Dissemination Core.
- National Collaborating Centre for Nursing and Supportive Care (NCCNSC). (2005). *Violence: The short-term management of disturbed/violent behaviour in psychiatric in-patient settings and emergency departments.* London (UK): National Institute for Clinical Excellence (NICE).
- National Institute for Clinical Excellence. (2004). *Self-harm: The short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care.* Clinical guideline 16. London, UK: Gaskell & British Psychological Society.
- Park, M., Hsiao-Chen Tang, J. & Ledford, L. (2005). *Changing the practice of physical restraint use in acute care.* Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Translation and Dissemination Core.
- Registered Nurses' Association of Ontario (RNAO). (rev. 2011). *Prevention of falls and fall injuries in the older adult.* Toronto (ON): Registered Nurses' Association of Ontario.
- Skemp Kelley, L., Pringle Specht, J. K. & Maas, M. L. (2001). *Family involvement in care for persons with Dementia.* Iowa City, Iowa: The University of Iowa Gerontological Nursing Interventions Research Center Research Translation and Dissemination Core.

Step 4: Literature Review

A university health sciences librarian conducted a database search for existing evidence related to restraint use. An initial search of the MEDLINE, Embase, CINAHL databases for primary studies and systematic reviews published from January 2000 to April 2010 was conducted in April 2010 using the following search terms: "Restraint", " Physical and Restrain", "Mechanical and Restrain", "Manual and Restrain", "Physical and Immobilization", "Chemical and Restrain", "Pharmacological and Restrain", "Environmental and Restrain", "Seclusion and Restrain", "Patient and Restrain", "Patient Isolation and Restraint, Physical", "Restrict and Device", "Restrain and Free", Restrain and Minimization", "Restraining and Restrain", "Restrain and Reduction", "Nursing", "Nurses", "Nurse or Nurses or Nursing", "Nursing Practice", "Nursing Assistants", "Patient Care", "Patient and Care", "Immobilization and Stress", Physical and Immobilization", "Treatments and Procedures and Restrain", "Nursing Care Coordination", "Suicide and Self Restraint". The members of the guideline development panel were also asked to review personal archives to identify key sentinel literature on the topic to ensure all evidence was captured in the literature search. As directed by the consensus panel, supplemental literature searches were conducted where needed.

The search was structured to meet the following inclusion/exclusion criteria and to answer the clinical questions identified by the guideline development panel . The identified on the topic of restraints was quality reviewed to inform the development of the guideline, Promoting Safety: Alternative Approaches to the Use of Restraints:

Inclusion Criteria:

1. Studies focus on one or more of the following topics:
   a. Assessment tools,
   b. Prevention strategies,
   c. Alternative approaches to the use of restraints,
   d. Client-centered care,
   e. Education/training programs,
   f. Ethics,
   g. Client safety,
   h. Restraint legislation/standards,
   i. Restraint use,
   j. Risk factors (clinical features) for the use of restraints (behaviours, cognitive impairments, treatment interference, triggers),

k. Type of restraints (physical/mechanical, chemical-pharmacological, environmental/seclusion), and
l. Organizational responsibilities.

2. The outcomes of intervention studies must be related to caring for clients at risk for restraints use.
3. Study publication dates range from January 2000 to April 2010 (Note: seminal papers that were published before January 2000 were also included for review).
4. Study publications that were published in English.
5. Systematic reviews, meta-analysis, qualitative and quantitative research studies.

Exclusion criteria:

1. Study focus does not relate to physical/mechanical, chemical or environmental restraint use.
2. Article that does not pertain to restraint use inclusion criteria.
3. Assessment or interventions that are not within the scope of nursing practice.
4. Study publications that are not written in English.
5. Dissertations, commentaries and narrative reviews (Note: these may be included as background information).

Clinical Questions:

1. What ***assessment approaches and tools are available*** to assist nurses to identify clients at risk for restraint use?
2. What ***prevention strategies and tools*** are available to support nurses to care for clients at risk for restraint use?
3. What ***de-escalation and crisis management*** techniques are available to support nurses to care for clients at risk for restraint use?
4. What ***safety and monitoring strategies*** does the nurse need to consider ***when restraints are considered as a last intervention?***
5. What ***education and training is required to support nurses*** in the implementation of alternative approaches and/or the use of restraints when caring for clients at risk for restraint use?
6. What ***organizational characteristics*** support nurses across all practice settings to move towards a restraint-free practice environment?
7. What ***studies are available on environments conducive to restraint-free practices***?

Search Results:

The search strategy described above resulted in the retrieval of 1312 abstracts on the topic of *Promoting Safety: Alternative Approaches to the Use of Restraints*. These abstracts were then screened by two research assistants in order to identify duplications and assess for inclusion and exclusion criteria as established by the panel, yielding a total of 290 articles to be included in the systematic review.

Step 5: Hand Search

A hand search of articles published since the database search that resulted in the systematic review (April 2010 to April 2011) was conducted to ensure no recently published research relating to the topic and guideline *Promoting Safety: Alternative Approaches to the Use of Restraints* resulted in new findings. Twenty-five articles were identified; however, only three were applicable based on the established inclusion and exclusion criteria. Panel consensus agreed that they offered no new findings but did further support the content already identified in the initial systematic review. The following four articles were used in the manuscript to support the findings from the initial systematic review:

- Möhler, R., Richter, T., Köpke, S. & Meyer, G. (2011). Interventions for preventing and reducing the use of physical restraints in long-term geriatric care (Review). *Cochrane Database of Systematic Reviews*, 2011, 2. Art. No.: CD007546. DOI: 10.1002/14651858.CD007546.pub2
- Sandhu, S., Mion, L., Khan, R., Ludwick, R., Claridge, J., Pile, J.,… Dietrich,M. (2010). Likelihood of ordering physical restraints: Influence of physician characteristics. *Journal of the American Geriatrics Society 58* (7), 1272-1278. doi: 10.1111/j.1532-5415.2010.02950.x
- Strout, T. (2010). Perspectives on the experience of being physically restrained: An integrative review of the qualitative literature. *International Journal of Mental Health Nursing 19*, 416-427. doi: 10.1111/j.1447-0349.2010.00694.x

Appendix D: Description of the Toolkit

Best practice guidelines can only be successfully implemented if there are: adequate planning, resources, organizational and administrative support as well as appropriate facilitation. In this light, RNAO, through a panel of nurses, researchers and administrators has developed the *Toolkit: Implementation of Clinical Practice Guidelines* based on available evidence, theoretical perspectives and consensus. The *Toolkit* is recommended for guiding the implementation of any clinical practice guideline in a health-care organization.

The *Toolkit* provides step-by-step directions to individuals and groups involved in planning, coordinating, and facilitating the guideline implementation. Specifically, the *Toolkit* addresses the following key steps in implementing a guideline:

1. Identifying a well-developed, evidence-based clinical practice guideline.
2. Identification, assessment and engagement of stakeholders.
3. Assessment of environmental readiness for guideline implementation.
4. Identifying and planning evidence-based implementation strategies.
5. Planning and implementing evaluation.
6. Identifying and securing required resources for implementation.

Implementing guidelines in practice that result in successful practice changes and positive clinical impact is a complex undertaking. The Toolkit is one key resource for managing this process. The toolkit can be downloaded at www.rnao.org/bestpractices.

Appendix E: Example: Experience of Being Restrained (SEBR) Interview Tool

The *Subjective Experience of Being Restrained (SEBR)* is a structured interview guide used with patients, first in a hospital study (Strumpf & Evans, 1988) and then in a subsequent nursing home study (Evans & Strumpf, 1987; Evans et. al., 1991). This instrument was used to guide the interview, but an open-ended, free-flowing discussion was sought with the subject; the interviews were audiotaped and transcribed for content analysis. No validity and reliability studies have been done on this instrument.

Subjective Experience Of Being Restrained (SEBR) Interview Guide

The authors give permission for use of this instrument.

Subject No._____

Date _____

Interviewer _____

1. While here in (name of hospital/nursing home), have you ever experienced having your movement limited or restricted in any way? (Use patient's own words or coach with "being tied down," "posey vest," "bedrails," "safety belt").

(Record patient's own words)	Yes	(TYPE)	
_____		belt/tie	1
_____		vest	2
_____		wrist	3
_____		ankle	4
_____		mitt	5
_____		bedrail	6
_____		other	7
_____			8
If No, go to #14	No		

2. IF YES, could you describe to the best of your recollection the circumstances surrounding the use of the (name device identified in #1 above)?

_____

_____

(NOTE: Use patient's own word for the "devices" - you may coach with time, place, persons involved, patient's behavior, situation, including whether in bed/chair, stretcher, w/c).

3. Do you recall having the (device) applied?

Yes 1

No 2

4. Did someone tell you why the (device) was being applied?

Yes 1

No 2

If Yes, what did they tell you?

_____

_____

5. What ideas do you have about other ways you might be (have been) helped with (Response given in #4) rather than the use of the (device)?

_____

_____

6. What do (did) you feel when having the (device) applied?

_____

_____

7. What do (did) you do when the (device) is (was) applied?

_____

_____

8. What did (does) the (device) prevent you from doing that you want(ed) or need(ed) to do?

_____

_____

9. How long is (was) the (device) left on?

_____

_____

10. How did (do) you deal with being (use patient's own words, or "tied down", "restrained", "restricted in your movement")?

_____

_____

11. Do you recall ever having the (device) removed?

Yes 1

No 2

12. What is (was) explained to you about having the (device) removed?

_____

_____

_____

13. (IF STILL RESTRAINED) How long do you expect this (device) to be used?

_____

_____

14. Do you have any memory of ever being confused while here in (name of hospital/nursing home)?

If Yes, describe.

_____

_____

15. Have you had any immediate effects from this (device)? (e.g., "discomfort"). If yes, describe.

_____

_____

_____

_____

_____

Thank You for Your Participation!

Lois Evans and Neville Strumpf

© 1986 University of Pennsylvania School of Nursing

Source: Evans, L. and Strumpf, N. (1986). Subjective Experience of Being Restrained. Penn Nursing Science: University of Pennsylvania School of Nursing.
Web link: www.nursing.upenn.edu/cisa/Pages/Research.aspx

Appendix F: Example: Short-Term Assessment of Risk and Treatability Tool (START)

BC Mental Health & Addiction Services
An Agency of the Provincial Health Services Authority
St. Joseph's Healthcare Hamilton

Name: _____
Last First Middle

Record #: _____

Male ❑ Female ❑ D.O.B _____
yy/mm/dd

Diagnosis: DSM-IV TR ❑ ICD-10 ❑

1 _____ 2 _____ 3 _____ 4 _____ 5 _____

STATUS: ❑ HOSPITAL Status: _____ ❑ COMMUNITY Status _____ ❑ CORRECTIONS Status: _____

PURPOSE: ❑ REFERAL ❑ ADMISSION ❑ REVIEW Specify: _____ ❑ OTHER Specify: _____

START Time Frame: _____
days/weeks/months

Key Item	Strengths 2	1	0	START Items	Vulnerabilities 2	1	0	Critical Item	SIGNATURE RISK SIGNS
❍	❑	❑	❑	1. Social Skills	❑	❑	❑	❍	
❍	❑	❑	❑	2. Relationships (TA: Y/N)*	❑	❑	❑	❍	
❍	❑	❑	❑	3. Occupational	❑	❑	❑	❍	
❍	❑	❑	❑	4. Recreational	❑	❑	❑	❍	**SPECIFIC RISK ESTIMATES**
❍	❑	❑	❑	5. Self-Care	❑	❑	❑	❍	**Hx*** **Risks** **T.H.R.E.A.T** **Low** **Mod** **High**
❍	❑	❑	❑	6. Mental State	❑	❑	❑	❍	❍ Violence No ❑ Yes ❑ ❑ ❑ ❑
❍	❑	❑	❑	7. Emotional State	❑	❑	❑	❍	❍ Self-Harm No ❑ Yes ❑ ❑ ❑ ❑
❍	❑	❑	❑	8. Substance Use	❑	❑	❑	❍	❍ Suicide No ❑ Yes ❑ ❑ ❑ ❑
❍	❑	❑	❑	9. Impulse Control	❑	❑	❑	❍	❍ Unauthorized Leave ❑ ❑ ❑
❍	❑	❑	❑	10. External Triggers	❑	❑	❑	❍	❍ Substance Abuse ❑ ❑ ❑
❍	❑	❑	❑	11. Social Support (PPS: Y/N)‡	❑	❑	❑	❍	❍ Self-Neglect ❑ ❑ ❑
❍	❑	❑	❑	12. Material Resources	❑	❑	❑	❍	❍ Being Victimized ❑ ❑ ❑
❍	❑	❑	❑	13. Attitudes	❑	❑	❑	❍	❍ Case Specific Risk: _____ ❑ ❑ ❑
❍	❑	❑	❑	14. Med. Adherence (N/A ❑)†	❑	❑	❑	❍	❍ **CURRENT MANAGEMENT MEASURES**
❍	❑	❑	❑	15. Rule Adherence	❑	❑	❑	❍	❍
❍	❑	❑	❑	16. Conduct	❑	❑	❑	❍	❍
❍	❑	❑	❑	17. Insight	❑	❑	❑	❍	❍
❍	❑	❑	❑	18. Plans	❑	❑	❑	❍	❍
❍	❑	❑	❑	19. Coping	❑	❑	❑	❍	❍
❍	❑	❑	❑	20. Treatability	❑	❑	❑	❍	❍ **Current Management Plan:**
❍	❑	❑	❑	21. Case Specifis Item: _____	❑	❑	❑	❍	❍
❍	❑	❑	❑	22. Case Specifis Item: _____	❑	❑	❑	❍	❍

Health Concerns/Medical Tests: _____

Risk Formulation: *what factors/predict-explain/which person/will carry out/what act/when?* _____

completed by: _____ date: _____

***TA - Therapeutic Alliance ‡PPS - Positive Peer Support †N/A – Not Applicable Hx - Historical**

Version 1.1 © 2009

APPENDICIES

The START assesses seven dynamic risks (violence to others, suicide, self-harm, being victimized, substance abuse, self-neglect, unauthorized absences and treatability) as low, moderate or high. History for the seven risks is also assessed. Twenty patient strengths and vulnerabilities are evaluated on the degree of absence or presence using ratings of 0, 1, or 2. Critical vulnerabilities and key strengths can be identified. Signature risk signs and risk formulation can also be identified. The START was designed for psychiatric and forensic inpatients and outpatients. A guide is available that details the use of the START and relevant evidence at http://www.bcmhas.ca/Research/Research_START.htm.

Strengths and vulnerabilities are rated for strength (0, 1, 2) & vulnerabilities (0, 1, 2) using a set of terms with ascribed meanings. Key and critical items are highlighted. Seven risks including violence to others, self-harm, suicide, unauthorized leave, substance abuse, self-neglect and victimization by others is assessed low, moderate or high.

Reprinted with permission from British Columbia Mental Health & Addiction Services.

Appendix G: Example: Broset Violence Checklist Tool

The Broset Violence Checklist (BVC)- quick instructions: Score the patient at agreed time on every shift. Absence of behaviour gives a score of 0. Presence of behaviour gives a score of 1. Maximum score (SUM) is 6. If behaviour is normal for a well known client, only an increase in behaviour scores 1, e.g. if a well know client normally is confused (has been so for a long time) this will give a score of 0. If an **increase** in confusion is observed this gives a score of 1.	Patient/ Client data

Monday / /			
	Day	Evening	Night
Confused			
Irritable			
Boisterous			
Verbal threats			
Physical threats			
Attacking objects			
SUM			

Tuesday / /			
	Day	Evening	Night
Confused			
Irritable			
Boisterous			
Verbal threats			
Physical threats			
Attacking objects			
SUM			

Wednesday / /			
	Day	Evening	Night
Confused			
Irritable			
Boisterous			
Verbal threats			
Physical threats			
Attacking objects			
SUM			

Thursday / /			
	Day	Evening	Night
Confused			
Irritable			
Boisterous			
Verbal threats			
Physical threats			
Attacking objects			
SUM			

Friday / /			
	Day	Evening	Night
Confused			
Irritable			
Boisterous			
Verbal threats			
Physical threats			
Attacking objects			
SUM			

Saturday / /			
	Day	Evening	Night
Confused			
Irritable			
Boisterous			
Verbal threats			
Physical threats			
Attacking objects			
SUM			

Sunday / /			
	Day	Evening	Night
Confused			
Irritable			
Boisterous			
Verbal threats			
Physical threats			
Attacking objects			
SUM			

Source: Almvik, R. & Woods, P. (April 1, 2003). Short-term risk prediction: The Broset Violence Checklist. *Journal of Psychiatric and Mental Health Nursing, 10*(2), 236-238.

Reprinted with permission from John Wiley and Sons.

Appendix H: Example: Historical-Clinical-Risk Management: 20 (HCR-20)

Historical-Clinical-Risk Management: 20 (HCR-20)

Historical Scale

- H1 Previous Violence
- H2 Young Age at First Violence Incident
- H3 Relationship Instability
- H4 Employment Problems
- H5 Substance Use Problems
- H6 Major Mental Illness
- H7 Psychopathy
- H8 Early Maladjustment
- H9 Personality Disorder
- H10 Prior Supervision Failure

Clinical Scale

- C1 Lack of insight
- C2 Negative Attitudes
- C3 Active Symptoms of Major Mental Illness
- C4 Impulsivity
- C5 Unresponsive to Treatment

Risk Management Scale

- R1 Plans Lack Feasibility
- R2 Exposure to De-stabilizers
- R3 Lack of Personal Support
- R4 Noncompliance with Remediation Attempts
- R5 Stress

The HCR-20 is used in mental health, forensic and criminal justice settings. The presence or absence of the 20 historical- clinical-risk management factors are identified according to 3 levels: Absent; Possible Present; or Definitely Present. The risk for future violence is assessed by the evaluation of the 20 risk items. HCR-20 is published by the Mental Health, Law and Policy Institute at Simon Fraser University. The HCR-20 Violence Risk Management Companion Guide is available. For information: http://kdouglas.wordpress.com/hcr-20/

Reprinted with permission from: Ronald Roesch, Professor, Director of Mental Health Law and Policy Institute, Simon Fraser University.

Appendix I: Example: Coping Agreement Questionnaire (CAQ)

Coping Agreement Questionnaire (CAQ)

(Copyright NY State Psychiatric Institute-from Hellerstein et al., 2007)

New York State Psychiatric Institute

TREATMENT PLAN **Coping Agreement**	Patient's Name (Last, First, M.I.) "C NO." _____ Sex_____ Date of Birth _____ Unit/Ward No.

Hospitalization can be a stressful time. Therefore, the nurse interviewer would like to find out the best ways to care for you in case you become upset and you need help dealing with your emotions. We are asking you to answer a few questions to help us assist you. Please keep the staff informed about how you are feeling at all times.

1. **What upsets you and/or causes you to lose control?**
   - ❑ Being Tired
   - ❑ Being Hungry
   - ❑ Having visitors
   - ❑ Being touched
   - ❑ Not being able to go home
   - ❑ Too much noise
   - ❑ Feeling lonely
   - ❑ Not having visitors
   - ❑ Feeling rejected
   - ❑ Other: _____

2. **What have you done when you were upset or lost control?**
   - ❑ Cry
   - ❑ Withdraw
   - ❑ Slam doors
   - ❑ Hurt myself
   - ❑ Other: _____
   - ❑ Throw things
   - ❑ Hit people
   - ❑ Strike out
   - ❑ Yell

3. **If I am about to lose control, please try the following things to help me calm down.**
   - ❑ Talk with me
   - ❑ Allow me to sit quietly by myself in a room
   - ❑ Have me deep breathe
   - ❑ Help me get involved in another activity
   - ❑ Give me medicine
   - ❑ Other:_____

4. **Family recommendations:** _____

If at any time, your emotional state puts you or others in an unsafe situation, and the information you have given us has not helped you gain control of yourself so that you are safe, staff will intervene by using an alternative intervention. A physical intervention will only be used as a protective method to help keep you or others safe. Once you have gained control, staff will once again review your treatment plan and coping agreement with you. Together we will make any necessary changes in your treatment.

5. **The following questions will be asked if clinically indicated: ❑ Not clinically indicated**

A. As a last resort, in a crisis situation which treatment would you prefer?

❑ Seclusion ❑ Restraint ❑ No Preference

B. If either seclusion of restraint is used, do you wish to have your family/significant other notified?

❑ Yes ❑ No

Patient's Signature: _____ Date: _____

Nurse's Signature: _____ Date: _____

Treating Physician's Signature: _____ Date: _____

Revision History: Place (X) if the revision is after seclusion/restraint; also document debriefing meeting in the progress notes.

Date: _____ Revision ( ) _____ Staff Signature _____

Date: _____ Revision ( ) _____ Staff Signature _____

Date: _____ Revision ( ) _____ Staff Signature _____

(If necessary continue revision history on a UCR Continuation Sheet)

Reprinted with Permission from David J. Hellerstein, MD.

Appendix J: Example: Alternative Approaches List

The Ottawa Hospital | L'Hôpital d'Ottawa

The Ottawa Hospital
Least Restraint Last Resort Policy
ADM VIII 540_

Table with examples/suggested alternatives and patient behaviours

Presenting Behaviours	Examples of Suggested Alternatives
1. Falls	• Medication review • Toileting regularly • Quad exercise: mobility/ ambulation • Routine positioning (Q2H) • Increased participation in ADL • Pain relief/comfort measures • Normal schedule/individual routine • Assess for hunger, pain, heat, cold • Glasses, hearing aids, walking aids easily available • Increase social interactions • Redirect with simple commands • Call bell demonstration • Involve family in planning care • Diversional activities: pets, music, puzzles, crafts, cards, snacks • Scheduling daily naps • Alarm devices- bed/chair/ door • Clutter free rooms • Mattress on floor/lower bed • Non-slip strips on floor • Night light • Helmet • Acceptance of risk

All requests to use or adapt the Alternative Approaches to Restraint Use must be directed to the Ottawa Hospital, Department of Nursing Professional Practice.

Presenting Behaviours	Examples of Suggested Alternatives
2. Cognitive Impairment- e.g. dementia	• Toileting regularly • Normal schedule/individual routine • Assess for hunger, pain, heat, cold • Label environment i.e. bathroom door • Increase social interactions • Redirect with simple commands • Gentle touch • Assessing past coping strategies • Involve family in planning care • Diversional activities: pets, music, puzzles, crafts, cards, snacks • Reminiscence • Scheduling daily naps • Pacing permitted • Alarm devices- bed/chair/door • Clutter free rooms • Night light • Glasses, hearing aids, walking aids easily available
3. Acute Confusion- delirium	• Medication review • Work-Up for underlying cause- see Pre-Printed Orders • Pain relief/comfort measures • Glasses, hearing aids, walking aids easily available • Toileting regularly-start q2h • Normal schedule/individual routine • Assess for hunger, pain, heat, cold • Label environment i.e. bathroom door • Increase/decrease social interactions • Redirect with simple commands • Gentle touch • Assessing past coping strategies • Involve family in planning care • Scheduling daily naps • Alarm devices- bed/chair/door • Clutter free rooms • Night light

Presenting Behaviours	Examples of Suggested Alternatives
4. Agitation	• Mobility/ambulation/exercise routine • Routine positioning (Q2H) • Medication review • Pain relief/comfort measures • Toileting regularly • Normal schedule/individual routine • Assess for hunger, pain, heat, cold • Increase social interactions • Redirect with simple commands • Relaxation techniques (tapes, dark environment) • Gentle touch • Assessing past coping strategies • Involve family in planning care • Diversional activities: pets, music, puzzles, crafts, cards, snacks • Scheduling daily naps • Pacing permitted
5. Wandering	• Assess for hunger, pain, heat, cold • Buddy system among staff/consistency • Label environment i.e. bathroom door • Increase social interactions • Redirect with simple commands • Assessing past coping strategies • Involve family in planning care • Diversional activities: pets, music, puzzles, crafts, cards, snacks • Tape (stop) line on floor • Alarm devices- bed/chair/door • Clutter free rooms • Night light • Room close to nursing station • Glasses, hearing aids, walking aids easily available
6. Sliding	• Consults to OT/PT • Routine positioning (Q2H) • Pain relief/comfort measures • Call bell demonstration • Wedge cushions/tilt wheelchairs (consult OT/ PT) • Non slip cushion (consult OT)

Presenting Behaviours	Examples of Suggested Alternatives
7. Aggression	• Medication review • Pain relief/comfort measures • Assessing past coping strategies • Normal schedule/individual routine • Assess for hunger, pain, heat, cold • Increase/decrease social interactions • Relaxation techniques (tapes, quiet/dark room) • Involve family in planning care • Pacing permitted • Soothing music
8. Pulling out invasives/ tubes	• Pain relief/comfort measures • Increase social interactions • Redirect with simple commands • Call bell demonstration • Stimulation/meaningful distraction • Explain procedures/treatments • Gentle touch • Involve family in planning care • Camouflage tubing on IV • Abdominal binder over PEG • Change IV to intermittent asap • Arm splint (prevent elbow bending)
9. Unsteadiness	• Mobility/ambulation/exercise • Medication review • Increase social interactions • Call bell demonstration • Scheduling daily naps • Clutter free rooms • Mattress on floor/lower bed • Non-slip strips on floor • Night light • Acceptance of injuries • Glasses, hearing aids, walking aids easily available

All requests to reproduce must be directed to The Ottawa Hospital Alternative to Restraints Decision Tree" must be directed to the Ottawa Hospital, Department of Nursing Professional Practice for permission".

Appendix K: Example: Caregivers Perceptions of Restraint Use Questionnaire (PRUQ)

Perceptions of Restraint Use Questionnaire (PRUQ)

Background and Instructions for Use

The Perceptions of Restraint Use Questionnaire (PRUQ) was developed to determine the relative importance caregivers ascribe to reasons for using physical restraints with the elderly. The tool was developed as a Likert scale (originally 3-point, now 5-point) from a review of the literature that included reasons for and attitudes about restraint use. It was judged to have face and content validity by a panel of five gerontologic nurse experts. It had a coefficient alpha of .80 with 18 professional hospital nurses and of .74 with a sample of 20 nursing home staff [Strumpf & Evans, 1987, 1988]. Following its expansion to 11 items, it had a coefficient alpha of .86 with 51 nurses who worked with the elderly in geriatric and geropsychiatric settings [Evans & Strumpf, 1987]. We have since modified the instrument to include more items regarding fall risk and treatment interference; this 17 item 5-point Likert scale is the one we currently employ in our research. Among 184 European nursing personnel, this version had a coefficient alpha of .96. In a sample of 87 American nursing home staff, it had a mean of 3.65 and a coefficient alpha of .94 [Evans & Strumpf, 1993].

Scoring Instructions for the PRUQ

To score the PRUQ, calculate a mean total scale score by summing the scores for each of the 17 items and dividing by 5 [the number of positions on the Likert scale]. As an example, staff in the three nursing homes in our clinical trial [JAGS 1997] averaged 3.8 (+/- 0.86, n=55), 4.02 (+/- 0.68, n=29) and 3.64 (+/- 0.83, n=55) at baseline.

For the "knowledge of alternatives" section, count the number of discrete interventions suggested by the respondent for a total (sum) score. These named interventions may be categorized into four types: physiologic, psychosocial, activity, and environmental. The Matrix of Behavioral Interventions (attached, and Strumpf, et. al., 1998, pp. 137-139) is used to code the types of interventions identified. Total number of interventions and subtotal for each type are tallied and a mean, median and mode derived for each.

Key: PH: physiological; PS: psychosocial; PA: physical activity; ENV: environmental; PR: physical restraint; CR: chemical restraint; SR: siderails; OIN: other, inappropriate intervention (e.g., seclusion, discharge to another facility); OAP: other, appropriate intervention (e.g., increase in staff).

This version of the PRUQ is for use in acute care settings; minor modification in the demographic items (e.g., #16, #19) may be made for use in nursing homes or other settings.

References:

Evans, L.K., & Strumpf, N.E. (1987). Patterns of restraint: A cross-cultural view. *Gerontologist, 27* (Supplement), 272A-273A.

Evans, L.K., & Strumpf, N.E. (1993). Frailty and physical restraint. In H.M. Perry, J.E. Morley, & R.M. Coe (Eds.), *Aging and musculoskeletal disorders*, pp. 324-333. New York: Springer.

Evans, L.K., & Strumpf, N.E. (1989). Tying down the elderly: A review of the literature on physical restraint. *Journal of the American Geriatrics Society*, 37, 65-74.

Strumpf, N.E., & Evans, L.K. (1987). Patterns of restraint use in a nursing home (Abstract). *Proceedings of the American Nurses Association Council of Nurse Researchers Meeting*, 410. Kansas City: ANA.

Strumpf, N.E., & Evans, L.K. (1988). Physical restraint of the hospitalized elderly: Perceptions of patients and nurses. *Nursing Research*, 37, 132-137.

Strumpf, N.E., Robinson, J.P., Wagner, J.S., & Evans, L.K. (1998). *Restraint-free care: Individualized approaches for frail elders*. New York: Springer.

Developed by Lois Evans and Neville Strumpf

© 1986. University of Pennsylvania School of Nursing; revised 1990 &, 2010.

Source: Evans, L. and Strumpf, N. (1986). Subjective Experience of Being Restrained. Penn Nursing Science: University of Pennsylvania School of Nursing. Web link: www.nursing.upenn.edu/cisa/Pages/Research.aspx

Perceptions of Restraint Use Questionnaire (PRUQ)

The authors give permission for use of this instrument.

DATE___/___/___

The Study Has Been Explained To Me To My Satisfaction. By Completing This Questionnaire, I Am Giving My Consent To Participate.

In caring for the older adult, physical restraints are sometimes used. Such restraints include vests, belts or sheet ties, crotch or diaper restraints, ankle or wrists ties, hand mitts, or locked geriatric chairs with fixed tray tables.

Following are reasons sometimes given for restraining older people. In general, how important do you believe the use of physical restraints are for each reason listed? (please circle the number that represents your choice)

	not at all important		Somewhat important		most important
1. Protecting an older person from:					
a. Falling out of bed?	1	2	3	4	5
b. Falling out of chair?	1	2	3	4	5
c. Unsafe ambulation?	1	2	3	4	5
2. Preventing an older person from wandering?	1	2	3	4	5
3. Preventing an older person from taking things from others?	1	2	3	4	5
4. Preventing an older person from getting into dangerous places or supplies?	1	2	3	4	5
5. Keeping a confused older person from bothering others?	1	2	3	4	5
6. Preventing an older person from:	1	2	3	5	5
a. Pulling out a catheter?	1	2	3	4	5
b. Pulling out a feeding tube?	1	2	3	4	5
c. Pulling out an IV?	1	2	3	4	5
d. Breaking open sutures?	1	2	3	4	5
e. Removing a dressing?	1	2	3	4	5
7. Providing quiet time or rest for an overactive older person?	1	2	3	5	
8. Providing for safety when judgment is impaired?	1	2	3	4	5
9. Substituting for staff observation?	1	2	3	4	5
10. Protecting staff or other patients from physical abusiveness/combativeness?	1	2	3	4	5
11. Managing agitation?	1	2	3	4	5

12. Please identify measures which could be used instead of physical restraints for the behaviors or situations listed above. Use the back of this sheet if necessary.

_____
_____
_____
_____
_____

13. Education: ❑ MSN ❑ BSN ❑ Diploma ❑ ADN

14. Age: ____

15. Sex: ❑ F ❑ M

16. Type of Unit: ❑ Medical ❑ Surgical ❑ Critical Care ❑ Other

17. Total length of employment in this facility: _____ years _____ months

18. Any specialized education in geriatrics? ❑ yes ❑ no

19. Position: ❑ Staff Nurse ❑ Nurse Manager ❑ Advanced Practice Nurse ❑ Certified Nursing Assistant

Coding: Total_____ PH_____ PS_____ PA_____ ENV_____ PR_____ CR_____ SR_____ OIN_____ OAP_____

©1986, 1990 Evans & Strumpf
University of Pennsylvania School of Nursing

Last updated May 12, 2010

Penn Nursing Science
Care to change the world.

Center for Integrative Science in Aging

Building integrative science addressing common and complex problems associated with aging

Matrix of Behaviors and Interventions*

Types of Interventions	Fall Risk	Treatment Interference	Other Behaviors
Physiologic	• Identification of reasons for falling and comprehensive assessment • Medication review/elimination of troublesome drugs • Evaluation and prescription for PT/OT, etc. • Rest • Elimination schedule	• Comfort • Pain relief • Assistance with elimination • Evaluation of need for change in treatment (e.g., remove IV/NG tubes, catheters; wean from ventilator)	• Comfort • Pain relief • Correction of underlying problem, e.g., dehydration • Positioning • Attention/assistance with eliminations • Sensory aids • Massage/aroma therapy
Psycho-social	• Supervision • Authorization of "no restraint" from resident/family • Fall/risk program • Anticipation of needs	• Companionship and supervision • Authorization of "no restraint" from resident/family • Encouragement of appropriate advance directive • Reassurance • Maintenance of communication with family/resident • Ethics consult as indicated • Guided exploration of device • "Contracting" for short-term use (if invasive treatment device)	• Companionship • Therapeutic touch • Active listening • Calm approach • Provision of sense of safety and security/validation of concerns • "Timeout" PRN • Caregiver consistency • Supervision • Promotion of trust and sense of purpose/mastery • Attention to resident's agenda • Reality orientation (if appropriate) • Remotivation • Attention to feelings and concerns • Facilitation of resident control over activities of daily living • Pastoral/spiritual counselling • Family visits and information sharing • Communications that are calm, sensitive to cues, and use simple statements/instructions

Types of Interventions	Fall Risk	Treatment Interference	Other Behaviors
Activities	• Daily physical therapy/ ambulation/weight bearing • Gait training • Fall-prevention program • Transfer assistance • Restorative program • Meaningful activity	• Distraction • Television, radio, music • Something to hold	• Distraction • Planned recreation (consistent with interest/abilities) • Exercise • PT/OT/ADL training • Social activity • Outlets for anxious behavior, especially structured activity • Night-time activities PRN • Redirection toward unit • Pet therapy • Structured routines • Spiritual activities and outlets
Environmental	• Chairs that slant or fit body, wedge cushions, abductor pillow or other customized seating • Low beds, bed rails down or single side rails, pads, accessible call light, mattress on floor, bedside commode, table placed in front of chair • Mobility aids and supportive shoes • Safety awareness training, fall-safe environment, alarm signal system, assistive devices, elevated toilet seat • Varied sitting locations • Optimal lighting	• Placement near nursing station • Accessible call light • Camouflaged or padded treatment site • Protective sleeves, garments, etc.	• Decreased use of intercom • Decreased/increased light as appropriate • Quiet room or soothing background music • Rocking chair • Personalized area/homelike environment/familiar objects • Camouflaged doors, exits, elevators • Velcro “doors”/gates/stop signs • Floor tape (grids) or planters to signal end of hallway • Special locks • Alarm systems • Contained areas that are safe and interesting • Special clothing • Varied seating and furnishings • Personal space • Structured environment • Room change as appropriate

*List provides examples, not intended to be exhaustive.

Source: Modified from Strumpf, et. al., (1998), pp. 137-139.
Reprinted with permission from Penn Nursing Science.

Appendix L: Example: ABC (Antecedent-Behaviour-Consequence) Charting Template

Figure 1. Antecedent-Behaviour-Consequence charting template

DATE AND TIME OF DAY	ANTECEDENT (IS THERE A TRIGGER?)	BEHAVIOUR (DESCRIPTION)	CONSEQUENCE (WHAT WAS THE RESPONSE?)

Adapted from Proulx.10

Source: Omelan, C. (2006). CME: Approach to managing behavioural disturbances in dementia. *Canadian Family Physician*, February, 52, pg.193.

Reprinted with permission from the Canadian Family Physician.

Appendix M: Example: Behaviour Monitoring Log

Penn Nursing Science
Care to change the world.™

Center for Integrative Science in Aging

Building integrative science addressing common and complex problems associated with aging

Behavior Monitoring Log

Background and Instructions for Use

Purpose:

To facilitate consistent observation and documentation of behaviors so that patterns and meaning can be determined.

Directions for use:

1. In the space next to the item labeled "Specific Target behavior," record the behavior under observation (e.g., falls from bed, leaves unit, hits others, pulls at dressing).

2. Record the client's name and room number in the spaces provided.

3. Record specific observations for each episode of the designated behavior in relevant columns of the log:
    a. In Column 1, record the date of the observation of behavior.
    b. In Column 2, record the exact time when the behavior was observed (Example: 10:30 AM).
    c. In Column 3, record exactly what behavior was observed (Example: fell when attempting to arise from chair unassisted).
    d. In Column 4, record location where the episode occurred (Example: red chair in day room).
    e. In Column 5, note persons who were present and what they were doing (Example: Clients T. Jones & P. Smith; C.N.A. (Certified Nursing Assistant) F. Fox talking with client T. Jones).
    f. In Column 6, describe what could be happening internally (*inside* the client) to precipitate the behavior (Example: Client stated she had to go to the bathroom urgently; had a diuretic at 9:00 AM).
    g. In Column 7, record what could be happening externally (*outside* the client) to precipitate the behavior (Example: No one available to take client to bathroom; client's walking frame out of reach behind chair; floor recently polished).
    h. In Column 8, describe what interventions helped (or could have helped) the client to resolve the behavior (Example: Taken to the bathroom every hour 9:30 AM to 12:30 PM, then every two hours until bedtime; kept walking frame next to chair when seated; obtained new shoes with non-skid soles).

4. Continue observation and documentation of designated behaviours until (a) pattern(s) in occurrence can be detected (e.g., behaviour seems to occur at specific times of day; certain persons in the environment appear to trigger a response; behaviour corresponds with a lifetime habit of afternoon walks, etc.).

5. Maintenance of the log for several episodes of the behaviour and around the clock will probably be necessary to detect patterns. As interventions that alter the behaviour are identified, these can be incorporated into the individualized care plan.

Penn Nursing Science
Care to change the world.

Center for Integrative Science in Aging

Building integrative science addressing common and complex problems associated with aging

Behavior Monitoring Log

The authors give permission for use of this instrument.

Specific Target Behavior: _____

Client's Name: _____ Room # _____

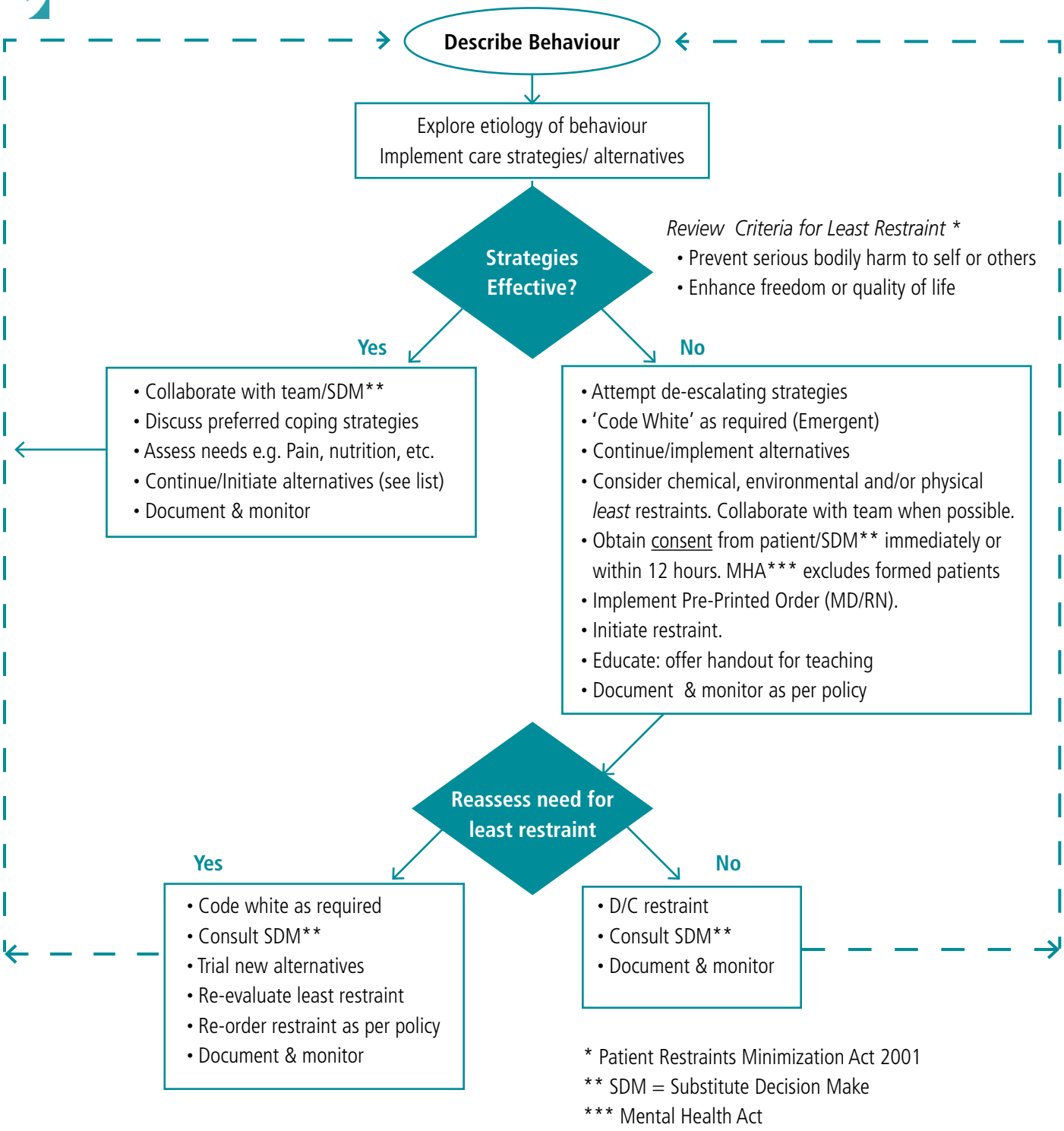
Date	Exact time	What happened?	Where?	Who else was present?	What could be happening internally (inside client) to precipitate behavior?	What could be happening externally (outside client) to precipitate behavior?	What interventions help (could help) client?

Adapted from: Strumpf, N., Robinson, E.J.P., Wagner, J.S., & Evans L.K. (1998). *Restraint-free care: Individual approaches for frail elders.* New York: Springer Publishing, pp. 44-46.

Reprinted with permission from Penn Nursing Science.

Appendix N: Example: Alternative to Restraints Decision Tree

The Ottawa Hospital | L'Hôpital d'Ottawa



All requests to use or adapt the Alternative to Restraints Decision Tree must be directed to the Ottawa Hospital, Department of Nursing Professional Practice.

Appendix O: Example: Mutual Action Plan (MAP) Behaviour Profile

MAP Behavioural Profile

Patient Name: _____ **Date Initiated:** _____

*Initial & date each new entry (DD/MM/YY)

How does the patient best learn? • Identify the patient's learning style and adapt teaching • Allow flexibility in decision making and power-sharing	
How does the patient best communicate? • Assess need for interpreter, communication tools, or signing • Identify any connection between the patient's thoughts, feelings, and behaviours. Connect patient's communication style and episodes of aggressive/maladaptive behaviour.	
Patient's aggressive, self-injurious, and/or maladaptive Behaviours • Precise details about these behaviours • Determine whether the behavior is sporadic or reoccurring • Ensure precision when documenting incidents; rarely occurring incidents should be reported as "highly infrequent"	
Antecedents and Triggers • Isolate any triggers leading to the aggressive, self-injurious, and/or maladaptive behaviours and recognize preventative measures. • Consider any potential environmental triggers • How do we prevent re-traumatization (be trauma-sensitive)	
Early Warning Signs • Identify early signs of aggressive, self-injurious and/or maladaptive behaviours • Refer to the escalation continuum (subtle, escalating, • imminent, or physical) • Recognize social withdrawal, agitated movement and increase verbalization as early signs of increased aggression.	
De-escalation Preferences and Techniques • Personalize strategies according to the patient's de-escalation preferences • Identify the use of verbal, relationship, or sensory techniques and tools • Does the patient have any known previous trauma? • How do we prevent re-traumatization (be trauma-sensitive)	
Describe the Therapeutic Interventions • Maintain knowledge of appropriate and interprofessional therapeutic intervention and relationship strategies. • Personalize interventions according to the patient's values, strengths, history and patient story	

Which behaviours can be Monitored from a Safe Distance? • Recognize that not all behaviors require physical intervention; such as throwing soft objects, and certain environmental damage. • Be aware that this type of behaviour may escalate	
Which behaviours require Physical Intervention? • Behaviors which require immediate physical action as they can cause harm to others or self such as strikes and kicks. • Identify the SMG intervention specifically	
Staff monitoring responsibilities • Continually monitor, assess, support, and check in with the patient's behaviour, physical and mental status to determine when to discontinue the physical intervention or seclusion. • Recognize individual staff's training, physical and clinical intervention skills, physical restriction and availability.	

Update the patient's MAP with pertinent information from the Behavioural Profile

MAP Behavioural Profile – DRAFT 2009/11/18 Adapted from Safe Management Group Inc. 2008. Copyright 2009, Ontario Shores Centre for Mental Health Sciences. All right reserved. Reproduction in whole or in part by any means without express written consent of Ontario Shores is prohibited by law.

Appendix P: Example: Safety Plan Interventions

Safety Plan Interventions

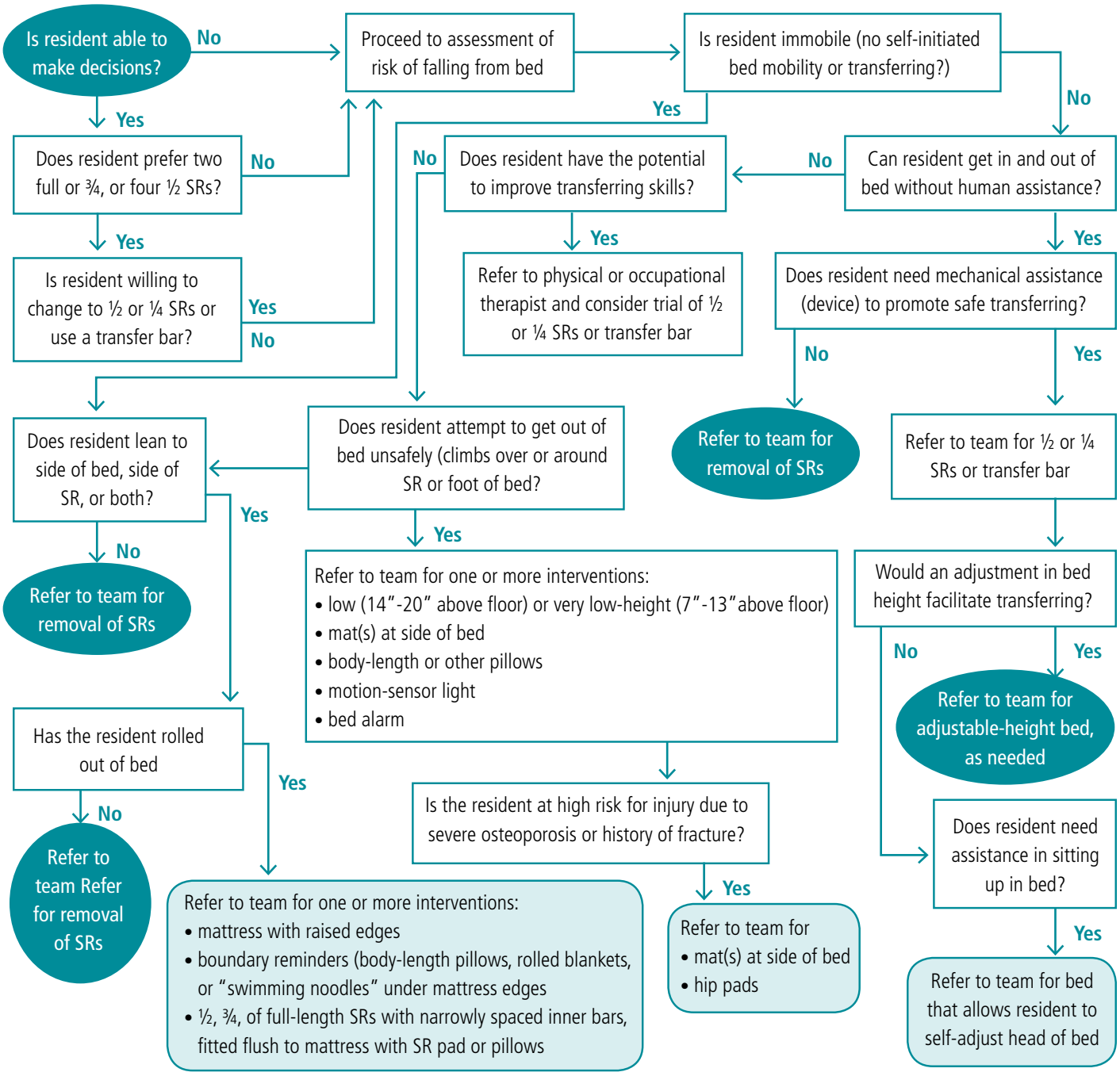
Purpose: for those residents who are exhibiting signs of aggression, disorientation, frequent falls, inappropriate behaviors, the following suggested interventions are to be tried and evaluated identified issues: _____

Therapeutic Interventions	Date Tried	Effective	Non Effective	Staff Initials
Orientated to surroundings				
Visual monitoring increased				
Improved lighting/night lights				
Room temperature adjusted				
Powered lift chair (if available)				
Chair seating has been reassessed				
Low bed				
Bed alarm				
Chair alarm				
Toileting routine has been individualized & reviewed				
Can clearly find bathroom? – pictures used				
Hip protectors – tried?				
Moved closer to Nurses station				
Sleep & rest periods have been reviewed & adjusted				
Acceptable & useable call bell in place/ available				
Correct footwear in use				
Food & fluid intake reviewed re hunger/thirst issues				
Activities reassessed and adjusted				
Identified pain related issues are addressed				
Contributing factors assessed for and treated e.g. infection				
1:1 activities implemented				
Increased walking/exercise programs				

Therapeutic Interventions	Date Tried	Effective	Non Effective	Staff Initials
Medication Review –dose/schedule adjusted				
Diversion therapy implemented				
Sturdy chairs for sitting in				
Assistive devices are accessible				
Bedside commodes in place				
Trapeze / bed poles available				
Floor mat				
Bed against wall				
Bed rail(specify # & type)				
Elbow/knee pads tried/implemented				
Behaviour mapping completed				
External referrals made (OT/PT etc)				
Music Therapy tried				
Anti-glide chair pad.				
Bed Wedges				
Alarmed seatbelt				
Foam perimeter mattress				
Date completed				

Reprinted with permission from Caressant Care.

Appendix Q: Example: Siderail and Alternative Equipment Intervention Decision Tree



*SR=side rail. "Team" refers to a decision-making person/group as specified by the institution: a multi-disciplinary restraint-reduction team, geriatric-consultation team, rehabilitation department, nurse manager or supervisor, or a gerontologic APN.

Adapted from: Talerico, K.A. & Capezuti, E. (2001). Myths and facts about side rails. Am J Nurs, 101:43-48. Abstract available at PubMed.

Source: Talerico, K. & Capezuti, E. Myths and facts about side rails: Despite ongoing debates about safety and efficacy, side rails are still a standard component of care in many hospital. So how do you determine their safe use? AJN: *American Journal of Nursing, Volume 101*, Issue 7, pp. 43-48. *Reprinted with permission from Wolters Kluwer Health*

Appendix R: Example: Personal De-escalation Plan

Personal De-escalation Plan

Patient Name: _____

Date: _____

PROBLEM BEHAVIORS: What type of behaviours are problems for you?

- ❑ Losing control
- ❑ Assaultive behaviour
- ❑ Restraints/Seclusion
- ❑ Feeling unsafe
- ❑ Running away
- ❑ Feeling suicidal
- ❑ Injuring yourself
- ❑ Suicide attempts
- ❑ Drug or alcohol abuse
- ❑ Other: _____

TRIGGERS: What type of things (triggers) make you feel unsafe or upset?

- ❑ Not being listened to
- ❑ Feeling pressured
- ❑ Being touched
- ❑ Lack of privacy
- ❑ People yelling
- ❑ Loud noises
- ❑ Feeling lonely
- ❑ Arguments
- ❑ Not having control
- ❑ Darkness
- ❑ Being isolated
- ❑ Being stared at
- ❑ Being teased or picked on
- ❑ Contact with family_____
- ❑ Particular time of day/ night: _____
- ❑ Particular time of year: _____
- ❑ Other: _____

WARNING SIGNS: Please describe your warning signs, for Example what other people may notice when you begin to lose control?

- ❑ Sweating
- ❑ Breathing hard
- ❑ Racing heart
- ❑ Clenching teeth
- ❑ Clenching fists
- ❑ Red faced
- ❑ Wringing hands
- ❑ Loud voice
- ❑ Sleeping a lot
- ❑ Bouncing legs
- ❑ Rocking
- ❑ Pacing
- ❑ Squatting
- ❑ Cant sit still
- ❑ Swearing
- ❑ Crying
- ❑ Isolating/ avoiding people
- ❑ Hyper
- ❑ Not taking care of self
- ❑ Hurting myself
- ❑ Hurting others or things
- ❑ Singing inappropriately
- ❑ Sleeping less
- ❑ Eating less
- ❑ Eating more
- ❑ Being rude
- ❑ Laughing loudly/ giddy
- ❑ Other: _____

INTERVENTIONS: What are some things that help to calm you down or keep you safe?

- ❑ Time out in your room
- ❑ Time out in the Quiet room
- ❑ Listening to music
- ❑ Reading a book
- ❑ Sitting with staff
- ❑ Watching TV
- ❑ Pacing
- ❑ Talking with peers
- ❑ Talking with staff
- ❑ Coloring
- ❑ Exercising
- ❑ Calling a friend (who?)
- ❑ Hugging a stuffed animal
- ❑ Writing in a journal
- ❑ Calling family (who?)
- ❑ Taking a hot shower
- ❑ Taking a cold shower
- ❑ Molding clay
- ❑ Blanket wraps
- ❑ Running cold water on hands
- ❑ Humor
- ❑ Lying down
- ❑ Ripping paper
- ❑ Screaming into pillow
- ❑ Using cold face cloth
- ❑ Using ice
- ❑ Punching a pillow
- ❑ Deep breathing exercises
- ❑ Having your hand held
- ❑ Crying
- ❑ Getting a hug
- ❑ Going for a walk
- ❑ Speaking with therapist

INTERVENTIONS (continue):

❑ Drawing ❑ Snapping bubble wrap ❑ Being read a story
❑ Making a collage ❑ Bouncing ball in QR ❑ Being around other people
❑ Playing cards ❑ Male staff support ❑ Female staff support
❑ Video games ❑ Using the gym ❑ Doing chores/ special jobs
❑ Other: _____

What are some things that **do not** help you calm down or stay safe?

❑ Being alone ❑ Loud tone of voice ❑ Humor
❑ Not being listened to ❑ Having many people around me
❑ Being disrespected ❑ Peers teasing ❑ Being ignored
❑ Other: _____

STRENGTHS: What are your strengths when feeling out of control?

_____

_____

SKILLS: What skills do you have/ what are you good at?

_____

_____

OTHER:

Are you able to communicate to staff when you are having a hard time? If not, what can staff do at these moments to help??

_____

_____

What kinds of incentives work for you?

_____

_____

SPECIAL PLANS: List any special plans that help you (things you have used in the past or would like to try).

_____

_____

_____

_____

Patient Signature:_____ Date:_____ ____

Staff Signature:_____ Date:_____ ____

Boston Medical Center
Intensive Residential Treatment Program
85 E. Newton St.
Boston, Ma. 02118

Reprinted with Permission from The Massachusetts Department of Mental Health.

Appendix S: Example: Safety Plan Women's Program

camh
Centre for Addiction and Mental Health
Centre de toxicomanie et de santé mentale

* D 0 4 5 2 A *

Client/Patient
Id Label

SAFETY PLAN
WOMEN'S PROGRAM

Client/Patient Name:_____ **Health Record #:**_____
(last name, first name)

Unit/Clinic/Service:_____

When I experience…	I have these body sensations, thoughts, and/or feelings…	…So I do this to stay safe and feel better	Resources
Mild Distress			
Moderate Distress			
Severe Distress			

© Centre for Addiction and Mental Health (2008)
DISCLAIMER: This material has been prepared solely for internal use at CAMH. CAMH accepts no responsibility for use of this material by any person or organization not associated with CAMH. No part of this document may be reproduced in any form for publication without the permission of CAMH. This is a controlled document. Any documents appearing in paper form are not controlled and should always be checked against the electronic version prior to use.

Page 137 of 146 – Safety Plan – Women's Program
F0458-20110419
Chart Tab: Assessments/ Plans

Reprinted with permission from the Center of Addiction and Mental Health

Appendix T: Example: Comfort Plan Mental Health And Addiction Program

COMFORT PLAN

❑ I developed this plan with my nurse _____ or other provider _____
(name of nurse) (name of person)

ID TAG (Please do not label individuals personal copy)

I like to be called: _____

My Distress Signs & Signals:
My warning signals, or things that others might see when I am upset or losing control are:
❑ Sweating
❑ Crying
❑ Breathing hard
❑ Yelling
❑ Hurting others
❑ Throwing objects
❑ Pacing
❑ Injuring self by
❑ Clenching teeth
❑ Not taking care of myself
❑ Running
❑ Clenching fist
❑ Swearing
❑ Not eating
❑ Over eating / binging
❑ Being rude
❑ Other _____

Comfort & Calming Measures:
These 5 activities that have helped me feel better when having a hard time.
❑ Listening to music
❑ Reading a book
❑ Wrapping myself in cozy blanket
❑ Writing in a journal
❑ Watching TV
❑ Talking with staff
❑ Talking with peers on the unit
❑ Calling a friend or family member
❑ Take a shower or bath
❑ Exercise
❑ Pacing in the halls
❑ Going for a walk
❑ Drinking a beverage
❑ Eating certain food(s)
❑ Working on a craft, artwork
❑ Medication
❑ Reading religious/spiritual material
❑ Writing a letter
❑ Hugging a stuffed animal
❑ Voluntary time in quiet/comfort room
❑ Other _____

My Triggers or Irritants:
Some things that make me angry, very upset or cause me to go into crisis?
❑ Being touched
❑ Security in uniform
❑ Yelling
❑ Loud noises
❑ Being restrained
❑ Being hungry
❑ Being tired
❑ Staff telling me to come back later
❑ Being called names, made fun of
❑ Being forced to do something
❑ Physical force
❑ Being isolated
❑ Being threatened
❑ Being anxious
❑ Being lonely
❑ Personal space violated
❑ Contact with person who upsets me
❑ Someone else lying about me
❑ Other _____

Seclusion & Restraints:
In extreme emergencies seclusion and/ or restraint may be used as a last resort.
In emergencies, I would find the following helpful in trying to prevent these from being used?
❑ Comfort or quiet room
❑ Exercise room
❑ Medications by mouth
❑ Emergency injection
❑ Other _____
I have experienced seclusion and/or restraint in the past. ___yes ___no

Medications:
If I need or want medications to help calm me, these would be my preference:
_____
_____
_____

Physical Contact:
I find it helpful to be touched appropriately when I am upset:
❑ yes
❑ no
Comments _____
_____
I am aware that staff may prefer not to touch me.

Gender Concerns:
I am aware that gender of staff is out of my control, but in an emergency I would prefer to speak with
❑ male staff
❑ female staff
If at all possible

Reprinted with permission from St. Joseph's Health Care Hamilton, Ontario

St. Joseph's Healthcare Hamilton

We Practice Trauma Informed Care

APPENDICIES

Appendix U: Example: De-escalation Tips and Interventions to Assist Patient to Cope

Provided by the Milwaukee County Mental Health Division
Milwaukee, WI

De-Escalation Tips

1. Always identify yourself.
2. Talk and think calm.
3. Ask patients how they are doing, or what's going on.
4. Ask patients if they are hurt (assess for medical problems).
5. Ask patients if they were having some difficulty or what happened before they got upset.
6. Remember why the patient is in the hospital.
7. Find a staff member that has a good rapport/relationship with the patient and have him or her talk to the patient. Let the patent know you are there to *listen*.
8. Offer medication if appropriate.
9. Help patients remember and use coping mechanisms they identified on the Patient reported Therapeutic Interventions Survey.
10. If a patient screams and swears, reply with a calm nod, okay, don't react.
11. Use team or third-party approach. If patient is wearing down one staff, have another take over (10 minutes of talking might avoid a restraint incident).
12. Reassure patients and maintain professional boundaries (tell patients you want them to be safe, that you are here to help them).
13. Allow quiet time for patents to respond – silent pauses are important.
14. Ask the patient if she/he would be willing, could try to talk to you (repeat requests, persistently, kindly).
15. Respect needs to communicate in different ways (recognize possible language/ cultural differences as well as the fear, shame, and embarrassment the patient may be experiencing).
16. Empower patients. Encourage them with every step towards calming themselves they take.
17. Make it okay to try and talk over the upsetting situation even though it may be very painful or difficult.
18. Acknowledge the significance of the situation for the patient.
19. Ask the patient how else we can help.
20. Ask the patient's permission to share important conversations with other caretakers for on-going discussion.

Provided by the Milwaukee County Mental Health Division
Milwaukee, WI

Interventions to Assist Patient to Cope

a. Listen to the patient's concern even if you don't understand.

b. Ask the patient to tell you what the problem is, and ***LISTEN*** sincerely.

c. Recognize and acknowledge the patient's right to his/her feelings.

d. Sit down if possible (maintain safety) and invite the patient to do likewise.

e. Invite the patient to talk in a quiet room or area where there is less of an audience and less stimulation.

f. Apologize if you did something that inadvertently upset the patent. Acknowledge feelings (not reasons) and state that it was unintentional.

g. Let the patient suggest alternatives and choices.

h. To maintain patent and staff safety, have adequate personnel available for crisis situations.

i. Speak in a calm, even, non-threatening voice. Speak in simple, clear and concise language.

j. Use non-threatening non-verbal gestures and stance.

k. Be aware of language, hearing, and cultural difference.

l. Assure the patient that she/he is in a safe place and we are here to help.

m. Recognize your personal feelings about violence and punishment and how it affects you when a patient is violent.

n. Be aware of how other staff positively interact with angry patents and model their interventions.

Adapted from Dr. Gudeman's interaction with patient on interventions with de-escalating patient 10/99
Reprinted with permission from the Milwaukee County Mental Health Division.

Appendix V: Resource List of Websites

Prevention, Assessment & Alternative Approaches	Site	Website Link
	BC Mental Health and Addictions Services • Short-Term Assessment of Risk and Treatability (START)	http://www.bcmhas.ca/Research/Research_START.htm
	COMBI - The Centre for Outcome Measurement in Brain Injury: • ABS forms & training, testing.	http://tbims.org/combi/abs/index.html
	Comfort Rooms - A Preventative Tool Used to Reduce the Use of Restraint and Seclusion in Facilities that Serve Individuals With Mental Illness • Ideas & Instructions for Implementation	http://www.omh.state.ny.us/omhweb/resources/publications/comfort_room/comfort_rooms.pdf
	Consult GeriRN.org - Physical Restraints • Protocols and topics • try this issues: Avoiding Restraints in Older Adults with Dementia	http://www.hartfordign.org/practice/consultgerirn/
	Gentle Persuasive Approach Curriculum • Report	http://www.marep.uwaterloo.ca/research/GPAProjectFinalReportJuly2005.pdf.pdf
	Ontario Association of Non Profit Homes and Services for Seniors(OANHSS): Policy & Procedures Training Packages (Examples) for: • Falls Prevention & Management Program • Responsive Behaviours • Minimizing Restraining and the Use of Personal Assistance Services Devices (PASD)	http://www.oanhss.org/AM/Template.cfm?Section=Home
	Massachusetts Department of Mental Health (DMH) (Adult/Child/Adolescent) • Restraint/Seclusion Reduction Initiative ▪ Age appropriate child, adolescent and adult interview tools	http://www.mass.gov/eohhs/gov/departments/dmh/
	Putting the P.I.E.C.E.S™ Together • Framework for assessment, tools & education	http://www.piecescanada.com/

	Substance Abuse and Mental Health Services Administration (SAMHSA) toolkit: • Toolkit for training of direct-care staff of adult clients with serious mental illness emotional disturbances in strategies for ▪ Prevention and elimination of seclusion and restraint ▪ Approach focused on consumer well-being • Trauma-Informed Care & Trauma Services	http://store.samhsa.gov/product/SMA06-4055 http://www.samhsa.gov/nctic/trauma.asp
	Te Pou- The National Centre of Mental Health Research, Information & Workforce: • On sensory modulation information and prevention tools to help limit the use of seclusion and restraint.	http://www.mhrds.govt.nz/page/398-seclusion-reduction-and-sensory-modulation
	Tidal Model • Philosophy, framework information	http://www.tidal-model.com/
	Texas Medical Foundation: TMF Health Quality Institute (Long Term Care)	http://www.tmf.org/
	Wellness Recovery Action Plan® (WRAP®) – Mary Ellen Copeland	http://www.mentalhealthrecovery.com/aboutwrap.php
De-Escalation & Crisis Management	**Site**	**Website**
	Chief Psychiatrist, Victoria, Australia • On line training resources for seclusion/restraint, trauma informed care, leadership & organizational change.	http://www.health.vic.gov.au/chiefpsychiatrist/creatingsafety/index.htm
	CPI: Crisis, Prevention, Intervention: • International training organization on best practices for safe behaviour management that focuses on prevention and non violent crisis intervention.	https://www.crisisprevention.com/Specialties
Restraints	**Site**	**Website**
	FDA Food and Drug Administration • Guide to Bed Safety • Physical Restraint definitions	http://www.fda.gov/default.htm
	Health Canada: • Guidance Document Adult Hospital Beds: Patient Entrapment Hazards, Side Rail Latching Reliability, and Other Hazards. • Safety Information on the Use of Waist and Torso Patient Restraints	http://www.hc-sc.gc.ca
	Psychiatric Patient Advocacy Office (PPAO) • Restraint, Physical, Chemical, Seclusion	http://www.sse.gov.on.ca/mohltc/ppao/en/default.aspx

	The University of Iowa: • Resident Restraint Free Care Flyer	http://www.healthcare.uiowa.edu/igec/publications/info-connect/assets/restraint_free_care.pdf
Legislation	**Site**	**Website**
	Canadian Mental Health Association • Ministry of Health and Long Term Care: ▪ Ontario Mental Health Act (1990) ▪ Health Care Consent Act (1996)	http://www.ontario.cmha.ca/legislation.asp
	College of Nurses of Ontario • Standard on Restraints	http://www.cno.org/
	Ministry of Health and Long-Term Care Long-Term Care Homes Act, 2010 • Legislation regarding restraints in long-term care (MOH-LTC- Ontario, Canada) Sections: 30-36	http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_07l08_e.htm#BK38
	Ministry of Health and Long-Term Care Patient's Restraint Minimization Act (2001) • Legislation regarding restraint use in hospital and facilities (Ministry of Health and Long Term Care [MOH-LTC] – Ontario, Canada)	http://www.e-laws.gov.on.ca/html/source/statutes/english/2001/elaws_src_s01016_e.htm
Other	**Site**	**Website**
	Advancing Excellence in Americas Nursing Homes • Quality Improvement Resources – Tools Tracking the Use of Restraints	http://www.nhqualitycampaign.org/
	National Association of State Mental Health Program Directors (NASMHD) • United States of America (USA) organization representing 50 states, 4 territories, and the District of Columbia providing: ▪ Policy, publications and links to Mental Health agencies. ▪ Tools: Six Core Strategies© to reduce the use of seclusion and restraint planning tool ▪ White Papers: Restraint and Seclusion: A Risk Management Guide	http://www.nasmhpd.org/publicationsOTA.cfm
	Hogg Foundation for Mental Health • Advances mental health wellness for Texas, USA ▪ Resource Library includes Debriefing and Seclusion and Restraint Tools, References and Training presentations	http://www.hogg.utexas.edu/index.php

Appendix W: Example: Observation and Documentation Record: 12-Hour Emergency Use of Chemical Restraint, Seclusion & Mechanical Restraint Record

12 -HOUR EMERGENCY USE OF CHEMICAL RESTRAINT, SECLUSION & MECHANICAL RESTRAINT RECORD

Complete when emergency chemical restraints, seclusion, and/or mechanical restraints are used

Please consult the following CAMH policy: Emergency Use of Chemical Restraint, Seclusion and Mechanical Restraint Policy

Requirements for Emergency Seclusion and Restraint Usage

1) A physician's order is needed for emergency restraint.
2) If a physician is not available in an emergency:
    a) An RN obtains a telephone order immediately following the use of emergency mechanical restraint or seclusion.
    b) A physician must assess the client/patient within 2 hours after the use of restraint and co-sign the order.
3) An order for mechanical restraint or seclusion must not exceed 12 hours.
4) If needed, mechanical restraint or seclusion must be reordered every 12 hours following face-to-face assessment by a physician.
5) The restrained client/patient must be asked if s/he would like a PPAO advocate contacted. Once consent is obtained call PPAO @ 416-535-8501, x 3099.
6) The nurse must complete Sections I and II of the 12-Hour Emergency Use of Chemical Restraint, Seclusion & Mechanical Restraint Record.

Section I: Initiation Assessment or Re-Order Assessment

1) Complete when initiating or re-ordering chemical restraint, seclusion, and/or mechanical restraint.
2) The nurse completes this section and signs the form at the bottom of the page.
3) The nurse also initials and dates any documentation done in the Communication section (on the lower right).
4) If any communication (as specified) is done within a 12 hour time frame after Section 1 is completed, it must be added to the Communication section.
5) Any additions to the Communication section should be initialed with date and time of entry.

Section II: Choose either a) 'Assessment Record-Mechanical Restraints' or b) 'Assessment Record- Seclusion'

1) Use either of these forms for ongoing monitoring and care provided during mechanical restraint or seclusion.
2) Time frames for entry on each form:
    a) On the mechanical restraint form each block represents a 30 minute timeframe.
    b) On the seclusion form each block represents a 15 minute timeframe.
3) The clock symbol indicates the nurse must provide mandatory care and initial.
4) If emergency chemical restraint (CR) is administered to a patient while in mechanical restraints or seclusion, record this in both Section I and Section II.

5) All status changes and/or significant findings require a corresponding progress note. Place an asterisk (*) beside any item for which you have written a progress note.
6) The 'assigned nurse' is the nurse assigned to care for the patient or the covering nurse (e.g. covering breaks). The assigned nurse is accountable for reviewing and ensuring that standards of care are met. This includes assessments, monitoring, the use of alternatives and other policy requirements. S/He continues to have this accountability even if some aspects of care are assigned to other team members (who initial in boxes to indicate care and/or observations). The assigned nurse initials a minimum of once every 3 hours in the box to indicate accountability.
7) **Notes:**
    a) Typically, after two hours, a release trial (RT) should be considered successful and seclusion/mechanical restraint should be discontinued.
    b) Enter initials for face to face continuous observation to indicate ongoing monitoring. You must initial a minimum of once every hour.

Electronic Tools to be used in addition to Progress Notes for Emergency Use of Restraints: All chemical restraint, seclusion, and mechanical restraint episodes must be entered in the Restraint Events Tool on TREAT on initiation and when discontinued.

Forms to Be Used: (Effective June 2009/ Updated January 2010) Physicians' Orders Form; Medication Administration Record; 12-Hour Emergency Use of Chemical Restraint, Seclusion & Mechanical Restraint Record; Physical Monitoring Vital Signs & Intake/Output.

© Centre for Addiction and Mental Health (2009) Adapted from The Ottawa Hospital (2003) and Trillium Health Centre (2006)
DISCLAIMER: This material has been prepared solely for internal use at CAMH. CAMH accepts no responsibility for use of this material by any person or organization not associated with CAMH. No part of this document may be reproduced in any form for publication without the permission of CAMH. This is a controlled document. Any documents appearing in paper form are not controlled and should always be checked against the electronic version prior to use.

Instruction page - Restraint Record
F0475-20111110
This page not to be filed in client/patient health record.

camh
Centre for Addiction and Mental Health
Centre de toxicomanie et de santé mentale

* D 0 4 5 2 A *

Client/Patient
Id Label

12 -HOUR EMERGENCY USE OF CHEMICAL RESTRAINT, SECLUSION & MECHANICAL RESTRAINT RECORD

Client/Patient Name:_____ **Health Record #:**_____ **Unit/Clinic/Service:**_____
(last name, first name)

SECTION I: INITIATION ASSESSMENT OR RE-ORDER ASSESSMENT

Check all boxes that apply. Place an asterisk (*) for items that have a corresponding progress note.

ALTERNATIVES & INTERVENTIONS ATTEMPTED		BEHAVIOUR(S) OBSERVED AND IMMINENT RISK OF SERIOUS BODILY HARM	PHYSICIAN'S ORDER	SUBSEQUENT
❑ 1:1 Engagement ❑ Exercise ❑ Family/friends ❑ OT/PT/SW/RT/BT involvement ❑ Peer Support Worker ❑ Spiritual Care ❑ Assess for linguistic and cognitive communication, hearing and visual difficulties	❑ Ask HALT (hungry, angry, lonely, tired) ❑ Music ❑ Pain management ❑ Support/reassurance ❑ Separate from situation ❑ Other_____ _____ _____ PRN Medication (consent required)	❑ Toward Self * Describe: _____ _____ _____ _____ ❑ Toward Other(s)* Describe: _____ _____ _____ _____	Physician Name _____ (last name, first name) ❑ Chemical – stat medication ❑ Seclusion (SR) ❑ Mechanical Restraint (MR) # of points Date/Time Initiated _____ (dd/mm/yyyy – 24 hr) ❑ Entry on TREAT Restraint Events Tool	❑ CR Episode # 2 (TREAT) _____ Physician Name (last name, first name) _____ Date/Time Given (dd/mm/yyyy – 24 hr) ❑ CR Episode # 3 (TREAT) _____ Physician Name (last name, first name) _____ Date/Time Given (dd/mm/yyyy – 24 hr)

HEALTH STATUS AT INITIATION / APPLICATION / RE-ORDER	COMMUNICATION *document communication details in Progress Notes
Significant medical problems, physical disabilities, pain _____ Difficulty breathing (Y*/N) ____ Breathing complaint (Y*/N) ____ Observable skin color change (Y*/N) ____ Skin condition (e.g., warm, dry, clammy) ____ Injury due to CR/SR/MR (Y*/N) ____ Bleeding (Y*/N) ____ Cuts (Y*/N) ____ Scratches (Y*/N) ____ Bruises (Y*/N) ____ Other (Y*/N) ____ Describe emotional state:_____	❑ Family/SDM/Other notified with client's consent* (Date/Time/Initial)_____ ❑ PPAO notified with client's consent* (Date/Time/Initial) _____ ❑ Client declined PPAO notification (Date/Time/Initial) _____ ❑ eIPCC updated (Date/Time /Initial) _____ Comments (include date/time initial): _____ _____
Trauma Considerations:	

Nurse Completeing Section I at initiation (others to intiate/date data entered after initiation and print name at end of Section II)

_____ _____ Date: _____

Signature Print Name and Credentials (dd/mm/yy)

F0475-20111110

Chart Tab: Assessments/Plans

© 2009 CAMH, *see disclaimer on instruction page

camh
Centre for Addiction and Mental Health
Centre de toxicomanie et de santé mentale

* D 0 4 5 2 A *

Client/Patient
Id Label

12 -HOUR EMERGENCY USE OF CHEMICAL RESTRAINT, SECLUSION & MECHANICAL RESTRAINT RECORD

Client/Patient Name:_____ **Health Record #:**_____
(last name, first name)

SECTION II: Assessment Record - Mechanics restraints

Date: _____
(dd/mm/yy)

Initial in appropriate boxes to indicate "in progress" or "completed". Each box represents approximately 30 minutes.
Use an asterisk (*) to flag all status changes/significant findings and to indicate corresponding narrative in progress notes.
◷ = reminder of mandatory care and need for initials; **F-F** = face-to-face continuous observation.

TIME 30 min. intervals																								
A. Behaviours Observed		◷		◷		◷		◷		◷		◷		◷		◷		◷		◷		◷		◷
B. Alternatives/ interventions				◷				◷				◷				◷				◷				◷
F-F monitoring in progress	◷		◷		◷		◷		◷		◷		◷		◷		◷		◷		◷		◷	
Limbs release/ reposition/ROM q1hr		◷		◷		◷		◷		◷		◷		◷		◷		◷		◷		◷		◷
Ambulation q8hr																◷								
Vital signs q1hr	◷		◷		◷		◷		◷		◷		◷		◷		◷		◷		◷		◷	
Circulation/skin q30min	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷	◷
Toileting q2hr /PRN				◷				◷				◷				◷				◷				◷
Food/fluids offered /mouth care q2hrs				◷				◷				◷				◷				◷				◷
Observing Staff Initial																								
Assigned Nurse Initial																								

A. Behaviours Observed (record 1 to 3 prominent behaviours above)	**B. Alternatives or Interventions Implemented** (record 1 to 3 primary alternatives or interventions above) Restraint Interventions:
1. Agitation 2. Combative 3. Disorientation/confusion 4. Unable to follow instructions 5. Asleep 6. Quiet/cooperative 7. Other*_____	a. 1:1 Engagement b. Attempted to d/c restraint* c. Breathing exercises d. De-escalation techniques e. Diversional activities f. Family/friends present g. Medication review h. Orientation x 3 i. OT/PT/BT/SW j. Pain management k. PRN Rx (with consent) l. Sensory interventions m. Support/reassurance n. Other_____ o. Adjust MR straps* p. Decrease points* (min 3 points) q. Increase points* r. Chemical restraint* (pg 1) s. Release trial t. Discontinue restraint* (TREAT)

Print Name/Designation	Initials	Print Name/Designation	Initials	Print Name/Designation	Initials

F0475-20111110

Chart Tab: Assessments/Plans

© 2009 CAMH, *see disclaimer on instruction page

camh
Centre for Addiction and Mental Health
Centre de toxicomanie et de santé mentale

* D 0 4 5 2 A *

Client/Patient
Id Label

12 -HOUR EMERGENCY USE OF CHEMICAL RESTRAINT, SECLUSION & MECHANICAL RESTRAINT RECORD

Client/Patient Name:_____ **Health Record #:**_____
(last name, first name)

SECTION II: Assessment Record - Seclusion

Initial in appropriate boxes to indicate "in progress" or "completed".
Use an asterisk (*) to flag all status changes/significant findings and to indicate corresponding narrative in progress notes.
Each box represents approximately 15 minutes 🕒 = reminder of mandatory care and need for initials;

Date: _____
(dd/mm/yy)

TIME (15 min. intervals)																									
A. Behaviours Observed	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒
B. Alternatives/ interventions								🕒									🕒								🕒
Foods / Fluids q2h								🕒									🕒								🕒
Toileting q2h /PRN								🕒									🕒								🕒
Initials: Observation Staff																									
Initials: Assigned Staff																									
TIME																									
A. Behaviours Observed	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒
B. Alternatives/ interventions								🕒									🕒								🕒
Foods / Fluids q2h								🕒									🕒								🕒
Toileting q2h /PRN								🕒									🕒								🕒
Initials: Observation Staff																									
Initials: Assigned Staff																									

A. Behaviours Observed (record 1 to 3 prominent behaviours above) 1. Agitation 2. Combative 3. Disorientation/confusion 4. Unable to follow instructions 5. Asleep 6. Quiet/cooperative 7. Other*_____	**B. Alternatives or Interventions Implemented** (record 1 to 3 primary alternatives or interventions above) Restraint Interventions: a. 1:1 Engagement b. Attempted to d/c restraint* c. Breathing exercises d. De-escalation techniques e. Diversional activities f. Family/friends present g. Medication review h. Orientation x 3 i. OT/PT/BT/SW j. Pain management k. PRN Rx (with consent) l. Sensory interventions m. Support/reassurance n. Other_____ o. Adjust MR straps* p. Decrease points* (min 3 points) q. Increase points* r. Chemical restraint* (pg 1) s. Release trial t. Discontinue restraint* (TREAT)

Print Name/Designation	Initials	Print Name/Designation	Initials	Print Name/Designation	Initials

All reproductions contain the notice: "The copyright for this document/form belong to the Centre for Addiction and Mental Health (CAMH), Toronto, Ontario

© 2009 CAMH, *see disclaimer on instruction page

Appendix X: Example: Debriefing Form: Patient Debriefing Tool following Restraint/ Seclusion

Provided by Stone Institute of Psychiatry
Northwestern Memorial Hospital
Chicago, IL

Patient Debriefing Tool

Following Restraint/ Seclusion

(to be completed within 4-24 hours after release from restraint/ seclusion (r/s) by assigned RN)

1. Is there anything staff could have done to assist you with regaining control prior to going into R/S?
2. Were you attempting to give others cues that you were in need of special assistance or beginning to feel "out of control"?
3. Do you know why staff determined that you needed to be in seclusion and/or restraints?
4. In your estimation, was the length of time spent in R/S appropriate? Yes No (circle one)
   Do you think you could have returned to the unit sooner? Yes No (circle one)
5. You were in restraint/ seclusion for ____ hours. How did that time pass for you?
6. How do you feel regarding the care that was provided to you?
   Were your needs met? Yes No (circle one)
   Were you treated with respect? Yes No (circle one)
   Was your privacy maintained? Yes No (circle one)
7. What was the most helpful regarding the intervention?
   What was the least helpful?
8. How could we have made re-entry (your return to the unit, group, your peers) easier for you?

Used with permission, Northwestern Memorial ® Hospital

Appendix Y: Example: Organization Audit Form: Least Restraint Last Resort (LRLR) Program: Unit-based Data Collection Form for the Least Restraint Last Resort (LRLR) Program Adherence

Data Collectors: _____ Unit: Sample Size: Total beds/unit: Date:

INDICATORS: Unique	1	2	3	4	5	6	7	8	9	10	Totals		Results
Complete on all inpatients who meet the criteria for the LRLR program - Physical/Environmental Restraints											+	-	+ =% +&-
1. Is the patient behaviour documented on LRLR Nursing Documentation Form (or unit-specific)?													
2. Are interventions documented that addressed the underlying cause of the behaviour (LRLR Nursing documentation form or inter-professional notes)													
3. **Are alternatives /interventions documented prior to implementing a restraint?**													
4. Is there an order documented? (Physician's Order form)													
5. Is the order specific to restraint type and duration? (Physician's Order or LRLR form)													
6. Is there an order for a physical restraint q24 hours if necessary?													
7. **Is there consent of the patient or notification of the family/SDM within 12 hours noted?**													
8. Are the initial monitoring requirements clearly outlined in the chart? Q15min, q1h, q2h?													
9. Is the release q2h noted with interventions attempted?													
10.													

Section A

Unit: _____ Unit Census: _____ Data Collectors: _____ 2. _____
Locked Unit Y ❑ N ❑ Program/Portfolio:_____ Civic ❑; General ❑; HI ❑; TRC ❑

Section B

I. COMPLETE FOR ALL PATIENTS: Demographics	Patient 1	Patient 3	Patient 3	Patient 4	Patient 5
a) Patient room number					
b) Age					
c) Gender: indicate Male (M) or Female (F)					
d) Service (use key Code A #)					
2. COMPLETE FOR ALL PATIENTS: Fall Risk Assessment					
a) Has the patient been screened for falls (Fall Risk Profile or unit specific protocol completed-ICU/HI)? (Y or N)					
b) Are Universal Fall Interventions documented? (Y or N)					
c) Are "Individualized Fall Interventions" documented? (Y or N)					
3. COMPLETE FOR ALL PATIENTS: Least Restraint Assessment					
a) Is there a physical &/or chemical restraint order? (Y or N)					
b) Restraint type ordered- Chemical (C), Physical (P), Both (B), **or N/A if you answered "no" to 3a) and go to "Section C"**					
4. Chart Review for Patients with *Physical/Environmental Restraint* (if no, go to question 5)					
a) Is there an order Physician order form? (Y or N)					
b) Is the order described on the LRLR Record? (Y or N)					
c) Was there a PRN order? (Y or N)					
d) Is discussion of consent documented? (Y, N, or **F***) (either accepted or refused) ***F**= patients **formed** under MHA					
e) Assessment & behaviour documented (select Code B#)					
f) Alternatives/ Interventions attempted & documented (select Code C#)					
g) Order specific to restraint device? (Y or N)					
h) Is the order implemented? (Y or N)					
i) Type of physical restraint device (select Code D #)					
j) Patient monitored as per protocol? (Y or N)					
k) For **continued** restraint use, is there evidence of a new order q24 hrs. (Y, N, or N/A)					

5. Chart Review for Patients with Chemical Restraint (if no, go to Section C)					
a) Type of chemical restraint (select Code E#)					
b) Was the chemical restraint ordered PRN? (Y or N)					
c) Is discussion of consent documented? (Y, N, or **F***) (either accepted or refused) ***F**= patients **formed** under MHA					
d) Assessment & behaviour documented (select Code B#)					
e) Alternatives/ Interventions attempted & documented (select Code C#)					
f) Is the order implemented? (Y or N)					
Section C: Walk Through: Observation of All Patients as per Code D & Universal Fall Risk Interventions Sheet					
a) Physical/ environmental restraint observed on patient (Y or N) **if no, end here.**					
b) If yes, identify type (Code D #)					
c) Is there proper application of the restraint? (Y or N)					
d) Are 3 or more Universal Fall Risk Interventions in place? (Y or N)					

Comments

KEY CODES Code A: Service Code

Service	Service Code	Numeric Code
Bone Marrow Transplant	BMT	1.
Cardiac Care (Cardiology, Cardiac Surgery, and Coronary Care)	CAR, CSG (HI only), CCH is coronary care	2.
Dermatology	DER	3.
Family Medicine & General Practice	FAM	4.
General Surgery	GSA, GSB, GSC, GSU	5.
Geriatrics/GAU	GER	6.
Gynaecology/obstetrics	GYN	7.
Haematology	HEM	8.
Intensive Care – critical care	ICU	9.
General Medicine (Metabolism, Allergy, Gastroenterology, Rheumatology, Nephrology)	ME, MEA, MEB, MEC, MEO, NEP, GI	10.
Neurosciences	NLA, NLB, NRL NRS	11.
Oncology (Gyn.-Oncology, Medical Oncology, and Radiation Oncology)	G/O, ONC, RAD	12.
Orthopaedics	ORT	13.
Perinatology (antepartum)	PER	14.
Psychiatry	PSY	15.
Short Term Rehab (Civic)	REH	16.
Long Term Rehab: **TRC** New Streams: • **LCM: Locomotor Stream** previously grouped as "MRS (Musculoskeletal) & RSP (Respiratory)" • **NMS: Neuromuscular Stream** previously grouped as "NSP (Neurospinal) & STR (Stroke)" • **NCS: Neurocognitive stream** previously grouped as "ABI (Aquired Brain Injury) & BRS (Behavioural Rehab Service)	 LCM: Ward A NMS: Ward B NCS: Ward C	17.
Surgery (Ophthalmology, Otolaryngolgy, Dental, Anaesthesia, Plastic Surgery, Urology)	DEN, EST, OPH, ENT, PLA, URO	18.
Thoracic Surgery	THO	19.
Trauma	TRA	20.
Vascular	VAS	21.
Palliative Care (Queensway-Carleton only)	PAL	22.
Patients in emergency awaiting beds- with no admission service codes yet	ER	23.
Respirology	RES	24.
ALC/ APU	ACS, ACM	25.
Other -gyne		26.

KEY CODES

Code B: Reason for restraint use:	
(May choose more than one)	
1.	Agitation
2.	Impaired mobility
3.	Unable to follow instructions
4.	Disorientation/ confusion
5.	Movement disorder
6.	Memory deficit
7.	Combative
8.	Pulling out tubes/drains
9.	Other: specify in comments*
10.	Family request
11.	***No reason given***

Code D: Type of Physical Restraint:	
(May chose more than one)	
1.	Mitts
2.	Wheel chair belts
3.	Soft waist belts
4.	Pelvic support
5.	Limb holder (wrist/ ankle)
6.	4 or 5 point restraint
7.	**Other: specify in comments*** (Include homemade, sheets, etc)
8.	Bed rails with intent to restrain
9.	Geri chair with lap tray

Code C: Alternatives & Interventions attempted:	
(May choose more than one)	
1.	Occupational / Physio Therapist
2.	Regular toileting
3.	Observation (e.g., q 1h or q2 h)
4.	Family at bedside
5.	Diversional activities
6.	Sensory aids
7.	Explain procedure/ treatment
8.	Sitter at bedside
9.	Orientation/ reassurance
10.	Pain management
11	Medication review
12	Room change
13	Increase mobility / ADLs
14	Positioning
15.	Nourishment
16.	Family request
17.	Other: specify in comments*
18.	De-escalating
19.	Alternatives (e.g. arm splint, Poseyfloor mat, bed alarm, or safe wandering device, etc.)
20.	No alternatives documented
Code E: see list: Type of Chemical Restraint	
1.	Anxiolytic (ie Ativan, valium, Lorazepam, etc)
2.	Antipsychotic (Haldol, mellaril, respiradone, etc.)

All requests received by RNAO for permission to use or adapt the Appendix: "The Ottawa Hospital Organizational Audit Form" must be directed to the Ottawa Hospital, Department of Nursing Professional Practice for permission"

Notes

Notes

Notes

Clinical Best Practice Guidelines

Promoting Safety: Alternative Approaches to the Use of Restraints

FEBRUARY 2012 RNAO

ia BPG

INTERNATIONAL AFFAIRS & BEST PRACTICE GUIDELINES

TRANSFORMING NURSING THROUGH KNOWLEDGE

Clinical Best Practice Guidelines

FEBRUARY 2012

Promoting Safety: Alternative Approaches to the Use of Restraints

ISBN 978-1-926944-46-3

RNAO
Registered Nurses' Association of Ontario
L'Association des infirmières et infirmiers autorisés de l'Ontario

Ontario