

Stroke Best Practices for Occupational Therapy: Are We Meeting the Mark?

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Description

- Do OT services at KGH meet Canadian Stroke Best Practices?
 - Nov – Dec 2022: Eight – week student project auditing SBPs and acute care OT practice.
- Innovative audit tool to evaluate if KGH stroke OT practice captures SBPs.
 - Encompassed SBPs and common OT ax domains common across Ontario stroke hospitals.
 - Format: ease of use, assessment methods, coding / confidentiality, in / exclusion factors, limitations.
 - Student - led, preceptor - influenced, focus on identifying gaps for quality improvement.
- Results.
 - Thirty charts audited (10 excluded). Measures taken to reduce bias, ensure consistency, etc.
 - Excluded repatriations and palliative patients – no direct OT role due to several factors.

Sample Audit Form

Occupational Therapy Chart Audit of Stroke Best Practices at Kingston General Hospital (November 24, 2022)

OT Stroke Best Practices	() Pt 1	() Pt 2	() Pt 3	(X) Pt 4
48 HRS: Initiate initial ax & DC planning	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PAD 6	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No PAD	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PAD 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PAD 4
72 HRS: Complete ongoing ax & notes	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
72 HRS: Complete AFIM	<input checked="" type="checkbox"/> Yes PT <input type="checkbox"/> No PAD	<input checked="" type="checkbox"/> Yes O <input type="checkbox"/> No PAD	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PAD 6	<input checked="" type="checkbox"/> Yes PT <input type="checkbox"/> No PAD
Patients (pts) not initially meeting rehab criteria are monitored weekly for rehab readiness.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No NA-rehab ready	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
OT intervention starts once patient is medically stable.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Chart review includes the following:

OT Order	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Activity Order	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
BP Order	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
O2 Order	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
tNK / tPA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
EVT	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
NIHSS (48 hours)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No N/A
Imaging	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
MSK	() Pt 1	() Pt 2	() Pt 3	(X) Pt 4
Hand dominance	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Pain (U/E and shoulder)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Std Ax? NO	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Std Ax?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Std Ax?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Std Ax?
Skin				
• Pressure injuries	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?
• Edema	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Std Ax? NO
Sensation				
• Hot / cold	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?
• Extinction	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?
• Pain	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?
• Light touch	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Std Ax? NO	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?
• Hyperesthesia	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?
Positioning / Joint protection				
• Assessment	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
• Intervention (aids / equipment)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No N/A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No N/A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Tone	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Std Ax?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Std Ax? No, informal
U/E ROM				
• Shoulder (flex/ext, abd/add, IR/ER)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } further ax to follow + defer to PT notes
• Elbow (flex/ext)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } further ax to follow + defer to PT notes
• Wrist (flex/ext)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } further ax to follow + defer to PT notes
• Digits (flex/ext, abd/add)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } further ax to follow + defer to PT notes
MMT				
• Shoulder (flex/ext, abd/add, IR/ER)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } further ax to follow + defer to PT notes
• Elbow (flex/ext)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } further ax to follow + defer to PT notes
• Wrist (flex/ext)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } further ax to follow + defer to PT notes
• Digits (flex/ext, abd/add)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } deferred to PT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No } further ax to follow + defer to PT notes
• Bilateral grip	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Key Findings

Consistent (≥ 75%)	Mostly (50-74%)	Rarely (1- 49%)	Never (0%)
<p>Orders Excluding BP ranges</p> <p>Behaviour</p> <p>Cognition Orientation</p> <p>Communication Receptive and expressive</p>	<p>Orders BP</p> <p>MSK Hand dominance, U/E, shoulder pain</p> <p>Psychosocial Mood & affect</p> <p>Cognition Memory, insight, functional cognition</p> <p>Visual Perceptual Visual fields, scanning, object ID</p> <p>Functional Feeding</p> <p>Education Current status, Activity recommendations, Discharge planning</p>	<p>FULL MSK Ax - Scored as All or Nothing for the following U/E ROM, pressure injuries, edema, extinction (sensation), pain, light touch, MMT, gross motor (RAMs), FTN, opposition (fine motor), tone, positioning/joint protection, proprioception</p> <p>Fatigue Post - stroke fatigue – focus on cognitive fatigue.</p> <p>Psychosocial History of depression and / or standardized screens</p> <p>Cognition Alertness, attention, executive functioning, praxis</p> <p>Visual - Perceptual Drawing a clock, object discrimination</p> <p>Functional Tasks – Direct assessment Dressing, grooming, bowel/bladder, bathing, oral care, toileting, all functional mobility components</p> <p>Education – Dependent on Discharge Destination Driving, productive roles / leisure, falls, fatigue</p>	<p>Sensation Hot / cold, hyperesthesia</p> <p>Cognition Standardized screening tools</p> <p>Visual Perceptual Visual extinction, Copying a diagram, Pouring water into glass</p> <p>Functional Transportation, IADLs, Nutrition</p> <p>Education Sexuality and relationships, Community resources</p>

Key Points – Discussion

1. Acute care SBPs: Specific but not prescriptive?

- Suggests WHAT to assess but not WHO or HOW.
- SBPs for OTs may be more applicable to rehabilitation or community settings.
- SBPs in acute care are open to clinical interpretation

2. How do OT clinical factors influence SBPs?

- Competing and continuous factors affect individual interventions.
- “One and Done” OT visits.
- We need to use our “OT Eyes” More.
- “Off service” stroke patients may receive less focused interventions.

3. How do patient trajectories influence our SBPs?

- Patient trajectories may change → Discharge plan determine actual OT roles.
- Stroke QBP fall along a continuum → Not all are applicable to acute care.
- OTs must “Pass the Baton” → Handovers not practical unless protected time.

Key Points – Discussion

4. Who assesses function?

- OTs are THE “experts” in assessing function → Caseload may limit to chart reviews, reports.
- New graduates feel they miss the mark → Cycle of Assess and Discharge
- Biomedical Model → Limits focus on function
- Conditional Clinical Reasoning → Focus on safety / discharge planning

5. Are we missing the mark for repatriation patients?

- “Post Code Lottery” for repatriation patients → Acute care priorities only → limits treatment.
- Priority Matrix does not reflect SBPS → Exacerbated by pandemic factors

6. Are we supporting end of life care for palliative patients?

- OTs have clear palliative care roles → “Early” GoC decision limit OT roles (discharge)
- Focus on in - hospital end - of - life care → Contrasts with non – stroke patients (home)
- Patient and OT perspectives → Focus on QoL, occupation, discharge home.

Implications

- Highlighted practice gaps, areas for improvement, and clinical reflection.
- Staffing and caseload factors (pandemic related) influence if we meet SBPs.
- Interdisciplinary teamwork and collaboration support SBPs.
- Bar has been set for OTs to meet SBPs. Goal: Spring - Summer 2023.
- Next steps for program development and quality improvement.

*“Assessing function in acute care is like catching butterflies in the wind ...
We strive to capture the beauty and uniqueness of each stroke patient but
sometimes our net falls short.”*

Acknowledgements and Contact

- Interdisciplinary stroke team at KGH
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- OT team at KGH
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- Contact: Richard Kellowan, OT Reg. (Ont.)
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