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Stroke Rehabilitation and Strategies Towards the Prevention of Stroke

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Best interest assessments

Following a stroke, patients may experience cognitive, communication, or functional impairments that impact their ability to make decisions. Capacity assessments, as outlined in the Mental Capacity Act (2005), are therefore essential (Figure 13.1). These assessments must be decision-specific and often focus on key areas such as:

- Feeding and nutrition: decisions around safe swallowing and dietary needs
- Pathway planning: choosing between inpatient, community, or intensive rehabilitation
- Discharge destination: deciding whether the patient returns home, moves to a care home, or requires supported living

If a patient is assessed as lacking capacity, a best interest meeting should be held with the multidisciplinary team (MDT) and the patient's advocate or family members. When working with Caribbean communities, several cultural considerations are essential:

- Cultural context: Family involvement, spirituality, and collectivism often shape decision-making. Including extended family or faith community perspectives supports shared decisions.
- Communication approaches: Language preferences, non-verbal cues, and spiritual values must be respected to ensure understanding and trust.
- Building trust: Awareness of healthcare disparities and potential mistrust among Caribbean families is vital. A transparent, supportive approach helps ensure the patient's voice remains central.
- Decision-making styles: Many Caribbean households value collective decision-making, often involving elders or key family networks. Where appropriate, these individuals should be consulted in line with patient preferences and legal frameworks.

Professional boundaries and MDT roles

Therapists must navigate professional boundaries while advocating for the patient. Key decision-makers – such as housing authorities or care home providers – may influence options, and occupational therapists provide expertise to ensure decisions consider functional outcomes, safety, and quality of life. Table 13.1 describes the main roles involved.

Table 13.1 Multi Disciplinary Team working

Team Member / Role	Primary Responsibilities	Links to National Stroke Guidelines	Cultural and Shared Decision-Making Considerations
Occupational Therapist	Assess functional independence, ADLs, cognition, meaningful participation; plan rehab and secondary prevention	OT involvement in enhancing function, home adaptation, psychosocial support	Ensure rehab goals are meaningful within Caribbean cultural context (food, spirituality, social roles); engage family in goal-setting and discharge planning Incorporate culturally familiar activities or exercises; involve family in mobility
Physiotherapist	Improve mobility, balance, strength, endurance	Early mobilization and targeted physical rehab	activities or exercises; involve family in mobility

Team Member / Role	Primary Responsibilities	Links to National Stroke Guidelines	Cultural and Shared Decision-Making Considerations
Speech and Language Therapist	Assess and treat communication and swallowing difficulties	SLT assessment for all post-stroke patients with communication/swallowing issues	routines at home Use culturally and linguistically appropriate communication strategies; involve family in mealtime routines and communication aids Discuss treatment options with patient/family in culturally sensitive way; respect beliefs around traditional remedies and
Stroke Consultant/Physician	Medical management, thrombolysis/thrombectomy decisions, secondary prevention	Early specialist assessment, secondary prevention planning	

Team Member / Role	Primary Responsibilities	Links to National Stroke Guidelines	Cultural and Shared Decision-Making Considerations
Nurse/Specialist Stroke Nurse	Monitor vital signs, medication, ADLs, education	Nurse-led education and monitoring	spiritual practices Provide culturally relevant health education; support family involvement in care routines and decisions
Social Worker/Care Coordinator	Assess social needs, funding, care packages, housing	Social/community support post-discharge	Identify culturally specific community resources, faith groups, and support networks; involve family in care decisions

Team Member / Role	Primary Responsibilities	Links to National Stroke Guidelines	Cultural and Shared Decision-Making Considerations
Psychologist/Neuropsychologist	Address mood, cognition, adjustment	Psychosocial support and cognitive assessment	Consider cultural attitudes toward mental health; involve family in emotional and coping support
Dietitian	Nutritional assessment and dietary advice	Dietary modification and dysphagia support	Tailor diet plans to Caribbean preferences (e.g., ackee, callaloo, spices) while meeting health needs; educate family on healthy modifications

Team Member / Role	Primary Responsibilities	Links to National Stroke Guidelines	Cultural and Shared Decision-Making Considerations
Caregiver/Family	Support daily function, rehab exercises, psychosocial care	Involvement in education and care planning	Central to shared decision-making; influence acceptance of rehab, diet, spiritual and social needs

Supervision and reflection

Supervision provides a critical space for junior occupational therapists to develop their clinical reasoning, especially when working with UK Black Caribbean stroke patients, where stroke impairments, functional changes, and cultural needs intersect. Effective supervision encourages occupational therapists to integrate clinical knowledge with cultural competence, ensuring rehabilitation plans are both evidence-based and person-centred.

Using a structured reflective model can help guide this process. One widely used model is Gibbs’ Reflective Cycle (1988), which supports systematic reflection through six stages:

1. Description – What happened?
 - Example: A patient with a recent stroke presents with hemiplegia and aphasia. The occupational therapist notices family members have strong views on discharge planning.
2. Feelings – What were you thinking and feeling?
 - Example: The junior occupational therapist might feel unsure about balancing clinical needs with family expectations rooted in cultural traditions.

3. Evaluation – What was good and bad about the experience?
 - Example: Rehabilitation goals were achieved, but cultural perspectives on occupational identity and spirituality were overlooked in early planning stages.
4. Analysis – What sense can you make of the situation?
 - Example: Considering the National Stroke Guidelines alongside cultural beliefs highlights the need for shared decision-making and clear communication.
5. Conclusion – What else could you have done?
 - Example: Sought early input from extended family and explored culturally relevant practices to support culturally sensitive functional practice in rehabilitation and tailored secondary prevention advice.
6. Action Plan – If it arose again, what would you do?
 - Example: Explore service user values early on and tailor rehabilitation practices to allow for effective activity analysis and service user engagement. Consider service user family dynamics when organizing key meetings in relation to rehabilitation progress and pathway planning.

Benefits of reflective supervision for stroke care

Reflective supervision provides junior occupational therapists with structured opportunities to integrate clinical reasoning, cultural awareness, and professional growth. Using models such as the International Classification of Functioning, Disability and Health (ICF) (World Health Organization, 2001), occupational therapists can frame rehabilitation holistically – considering body function, activity, participation, and the personal and environmental factors influencing recovery. Coupled with Gibbs’ Reflective Cycle (description, feelings, evaluation, analysis, conclusion, action plan), reflection encourages critical thinking, self-awareness, and practical solutions to complex rehabilitation challenges.

Through guided supervision, junior occupational therapists can:

- Recognize stroke impairments (e.g., aphasia, mobility loss, cognitive changes) and understand their impact on occupational performance using the ICF framework to link functional loss with participation restrictions.
- Address functional and cultural needs by exploring how spiritual beliefs, family roles, and cultural traditions influence recovery for Black Caribbean patients.

- Identify health inequalities that may limit access to services or contribute to mistrust, helping staff consider advocacy roles within their practice.
- Develop culturally sensitive interventions, such as family-centred goal setting, dietary education adapted to Caribbean cuisine, or hair care routines that respect cultural identity.

Link to the four pillars of occupational therapy practice

Reflective supervision also supports professional development across all four pillars of occupational therapy practice (Table 13.2) (Royal College of Occupational Therapists, 2021).

Table 13.2 The four pillars of occupational therapy practice

Pillar	Role of Reflective Supervision in Stroke Care
Leadership	Builds inclusive leaders who challenge health inequalities, ensuring stroke care provision reflects diverse cultural needs
Professional Practice	Equips staff with evidence-based assessment skills and culturally sensitive interventions tailored to functional and cultural needs
Evidence, Research & Development	Encourages occupational therapists to engage in culturally inclusive research, addressing gaps in evidence for global majority groups
Facilitation of Learning	Promotes learning from the lived experiences of Black Caribbean stroke survivors to inform service improvements and education

Global vs local incidence and context of stroke: macro, meso, and micro contexts

Macro-level global impact of stroke in the UK Black Caribbean community

At a global (macro) level the World Stroke Organization’s (2025) Global Stroke Fact Sheet 2025 highlights the critical need for prevention: stroke remains the second leading cause of death and third leading cause of disability burden (DALYs) worldwide. In 2021, there were approximately 11.9 million new strokes, 93.8 million stroke survivors, and about 7 million deaths globally. Since 1990, stroke incidence has risen by 70%, mortality by 44%, and DALYs by 32%, with 87–89% of stroke-related burden in low and lower-middle income countries. Importantly, an estimated 84% of this burden is attributable to modifiable risk factors such as hypertension, air pollution, obesity, glucose dysregulation, tobacco use, and

physical inactivity – highlighting the enormous potential of preventive interventions (World Stroke Organization, 2025).

This global urgency aligns closely with the UK government's 10-Year Health Plan (Department of Health and Social Care, 2025), which signals a transformative shift in the NHS – from a focus on sickness to prevention, from hospital-based to community-centred care, and from analogue to digital services. The Plan commits to rebuilding a system that is proactive and population-focused, placing prevention at its core. Such alignment presents an opportunity for occupational therapists to embed secondary prevention into culturally meaningful and evidence-based practice for communities disproportionately affected by stroke, including the UK Black Caribbean population (Department of Health and Social Care, 2025).

Meso-level impact of stroke in the UK Black Caribbean community

At a national (meso) level, stroke remains a major health burden in the UK, with over 100,000 new cases annually and 1.4 million people living with stroke's long-term effects (Stroke Association, 2023). Around 85% of strokes are ischaemic, and data repeatedly show that Black Caribbean individuals experience stroke at a younger age with higher rates of hypertension, diabetes, and obesity compared to White groups (South London Stroke Register, 2020). Studies, including the Black & Asian Stroke Survivors (BASS) Project, highlight both increased risk and underrepresentation in rehabilitation services, underscoring the need for culturally tailored interventions (Different Strokes, 2025).

Population-level datasets such as the Sentinel Stroke National Audit Programme (SSNAP) and the NHS Race and Health Observatory further expose variation in access, timeliness of treatment (e.g., thrombolysis), and functional outcomes across ethnic groups (Sentinel Stroke National Audit Programme, 2023; NHS Race and Health Observatory, 2022). Despite better long-term survival in some studies, Black Caribbean survivors often have poorer functional outcomes up to five years post-stroke, pointing to gaps in rehabilitation intensity/access, secondary prevention education, and culturally sensitive service design (King's College London, 2021).

For occupational therapy, these meso-level findings have clear implications: rehabilitation planning must bridge clinical needs and cultural identity, using the ICF framework to link

impairments (e.g., aphasia, neglect) with activity and participation goals (e.g., cooking Caribbean meals, engaging in culturally relevant activity and managing faith and family roles). Family-centred, co-produced decision-making around areas such as discharge planning, secondary prevention, and goal setting, is critical to improving engagement, adherence, and long-term outcomes while addressing both health inequalities and cultural priorities.

Micro-level insights: what this means for OT practice

1. Younger Patients with Higher Vascular Risk
 - Occupational therapists must anticipate that Black Caribbean stroke patients may be in their working years, balancing roles like employment, family life, and caregiving – all of which demand culturally meaningful and age-relevant rehabilitation planning.
2. Functional Needs and Cultural Participation
 - Through the ICF framework, occupational therapists can map impairments (e.g., neglect, limb weakness) to functional challenges (e.g., cooking, self-care) and participation restrictions in culturally relevant activities and events.
3. Secondary Prevention with Cultural Context
 - Use cooking sessions to promote healthy versions of traditional foods (wholemeal flour, lean fillings), embed Blood Pressure monitoring, and encourage physical activities with cultural resonance (e.g., soca aerobics) for lifestyle modification.
4. Family-Centred Shared Decision-Making
 - Given the collective decision styles in Caribbean households, occupational therapists should facilitate best interest conversations with extended family, incorporating cultural priorities while managing safety and rehab goals.
5. Addressing Inequities in Access and Outcomes
 - The data highlights systemic gaps – delayed thrombolysis, delayed presentations, poorer functional recovery – which occupational therapists can address via community education, advocacy, and inclusivity in service pathways.

Occupational Gift

Occupational gift: Jamaican patties

Jamaican patties hold deep cultural significance as symbols of Jamaican identity, resilience, and heritage. In the seventeenth century, when Jamaica was colonized by the British Empire, British settlers introduced foods such as the Cornish pasty, a meat-filled pastry that would influence the shape and style of what later became the Jamaican patty.

However, colonization also brought centuries of exploitation. Enslaved Africans were forcibly transported to Jamaica to work on sugar plantations, bringing with them rich culinary traditions, including the use of aromatic spices and seasonings. Following the abolition of slavery in the nineteenth century, Britain turned to indentured labourers from India and China to meet the island's agricultural demands. These communities added further layers of flavour, with Indian workers introducing curry spices and seasonings that transformed the British pasty into something uniquely Jamaican.

By merging British techniques with African heat and Indian spices, the Jamaican patty emerged as a vibrant, flavourful creation. Over time, it became a staple food, sold by street vendors and served at family gatherings, celebrations, and cultural festivals. Fillings expanded to include beef, chicken, lamb, vegetables, and even saltfish, reflecting Jamaica's diverse cultural influences and local produce.

For the UK Caribbean community, especially the descendants of the Windrush generation, making and sharing Jamaican patties preserve these intertwined histories. They represent survival through colonization, the blending of African, Indian, and European delicacies and the creativity born from hardship. Today, whether purchased from a Caribbean vendor or enjoyed at home, Jamaican patties offer a taste of heritage, belonging, and cultural pride across generations. The Jamaican patty is a true representation of Jamaica's history and a reflection of the national motto: 'Out of Many, One People'.

Hotspot OT gift: Making Jamaican patties

Recipe: Jamaican Beef Patties

Ingredients:

- 250g minced beef (or vegetarian alternative)
- 1 small onion (chopped)
- 1 scotch bonnet (optional, finely chopped)
- 1 tbsp curry powder
- 1 tsp thyme
- 1 tsp all-purpose seasoning
- ½ cup breadcrumbs
- 1 egg (for glazing)
- 250g plain flour
- 100g butter or margarine
- ½ tsp turmeric (for pastry colour)
- Cold water (to mix)

Method

1. Prepare Pastry:
 - Mix flour, turmeric, and butter using fingertips until crumbly.
 - Slowly add cold water to form dough.
 - Roll out dough and cut into circles.
2. Make Filling:
 - Brown minced beef with onion, scotch bonnet, and spices.
 - Add breadcrumbs to thicken mixture.
3. Assemble Patties:
 - Spoon filling onto pastry circles.
 - Fold into half-moons and seal edges with a fork.
 - Glaze with beaten egg.
4. Bake:
 - Place on tray and bake at 180°C for 25–30 mins until golden.

Cultural relevance

Occupational therapists play an important role in promoting healthy lifestyles as part of secondary stroke prevention, especially when cultural foods are central to identity and wellbeing. For the Caribbean community, dishes like Jamaican patties hold strong cultural significance but can be adapted to support cardiovascular health. Occupational therapists can provide education on food swaps – for example, using wholemeal flour for the pastry, lean minced turkey or plant-based proteins instead of fatty meats, reducing salt by using fresh herbs such as thyme and scallion for flavour, and baking rather than frying. These changes maintain the cultural relevance of patty making while aligning with dietary guidance to

reduce cholesterol, blood pressure, and stroke risk. Cooking sessions can also be used therapeutically to support motor recovery, cognitive engagement, and social participation, helping patients regain skills while learning practical ways to live well after stroke.

Using this familiar recipe transforms a rehabilitation exercise (Table 13.3) into a meaningful and motivating activity for Angela, helping her reconnect with her cultural identity while achieving functional goals.

Table 13.3 Rehabilitation exercise while making the recipe

Therapy Goal	Intervention Within Task	OT Rationale
Left Upper Limb Strength & Coordination	Rolling pastry, folding patties, sealing edges	Promotes repetitive, purposeful movement to strengthen weak limb
Left-Sided Neglect	Position ingredients and tools on left side	Encourages visual scanning and attention to affected side
Cognitive Function	Following multi-step recipe	Supports sequencing, problem-solving, and memory recall
Fatigue Management	Breaking task into short sessions (e.g., prep vs. baking)	Prevents overexertion, mirrors pacing strategies for ADLs
Psychosocial Wellbeing	Sharing patties with family or staff	Boosts mood, identity, and social participation

- Cultural Identity: Making a familiar Caribbean dish links therapy to Angela’s heritage and family traditions.
- Functional Independence: Cooking skills are directly transferable to home life post-discharge.
- Motivation: Food-based, culturally meaningful tasks increase engagement compared to standard exercises.

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