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**Stroke Treatment Across The  
Care Continuum Virtual  
Conference**

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**Facilitating Return to Work after  
Stroke across the Continuum of Care**

**Shannon L. Scott OTD, OTR/L**

## Objectives

1. Describe how to implement occupation-based assessments that address work across the continuum of care.
2. Identify interventions, resources, and collaborative relationships that can facilitate return to work after stroke across the continuum of care.
3. List steps that can be immediately implemented to establish or enhance services that address and facilitate return to work after stroke.

## Course Outline

- Introduction
- Addressing Return to Work Across the Continuum
- Reimbursement Mechanisms
- Laws, Regulations, & Resources that Support Return to Work
- Predictors of Return to Work Following Stroke
- Overcoming Potential Barriers
- Summary/Q&A

# Introduction

- Belinda, married, 39 year old mother of four. Suffered a stroke at home with her children While decorating for Halloween.

National Stroke Association [www.stroke.org](http://www.stroke.org)

## Problem

Stroke ↑ in working aged adults<sup>1</sup> with low rates of return to work (RTW)<sup>2</sup>

AUTHOR	SAMPLE/ COUNTRY	OUTCOME/ PREDICTIVE FACTORS
Andersen (2012)	N=83 Denmark	53% RTW by 1 year, 58% by 2 years Fatigue
Busch (2009)	N=266 United Kingdom	35% RTW by 1 year Ethnicity, age, gender, DM
O'Brien (2010)	N=98 United States	54% RTW at 6 months OT services
Saeki (2010)	N = 253 Japan	55% RTW by 1 year Rehab and support programs
Peters (2013)	N=101 Nigeria	55% RTW by 1 year Rehab and support programs

## Background/Problem

Inability to RTW is burden to both society<sup>1</sup> & the individual<sup>3</sup>

Rehabilitation Services as confound...

- May not be received<sup>4</sup>
- May not address age-related needs (work)<sup>5</sup>
- May not be designed for neurological population<sup>6</sup>

## Background/Problem

- Early motivation secondary to fear of loss of employment and benefits<sup>2</sup>
- Mixed feelings; strong motivation & confidence<sup>14</sup>
- Unprepared<sup>2</sup>
- Requires multiple strategies & accommodations<sup>16</sup>
- Not aware of available resources<sup>2</sup>
- Persistent stroke related impairments<sup>17</sup>
- 15% leave within the first 6 months<sup>17</sup>

## Background/Problem

- Evidence supports role of OT in promoting RTW for other populations<sup>7</sup>
- Gap in services to individual's after stroke<sup>8</sup>
- Lack of healthcare provider knowledge?<sup>2,4</sup>
- National cross-sectional survey revealed gaps in knowledge and practice<sup>9</sup>

## Work has Value

- Brad, long distance runner. Suffered a hemorrhagic stroke.
- “My wife had become my full-time caregiver...I hated the fact that her career now had to take a backseat to my recovery...The feeling of returning to my career was extremely emotional for me because, at one time, it seemed like something that was so out of reach. Returning to work was not easy”

National Stroke Association [www.stroke.org](http://www.stroke.org)

## Value of Work

### In General<sup>2</sup>

- Structure
- Personal Identity
- Societal Role
- Financial Security
- Independence
- Psychosocial benefit

### After Stroke

- Daily structure<sup>19</sup>
- Indication of normalcy<sup>19</sup>
- Rebuilding a sense of self<sup>19</sup>
- Socialization<sup>19</sup>
- Ongoing Rehabilitation<sup>19</sup>
- Perceived sense of recovery<sup>19</sup>
- Quality of life<sup>18</sup>

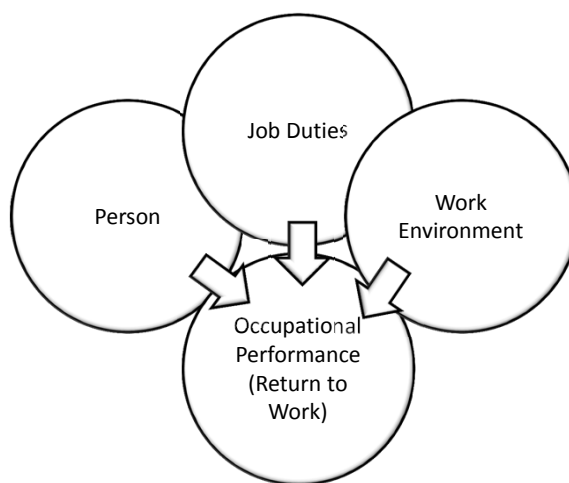
## Work & the Occupational Therapy Process

- Dan, suffered a hemorrhagic stroke at age 50. Experienced severe depression but with medication & counselling. Starting setting goals to “resume a normal life again”. Returned to work 8 months after his stroke.

National Stroke Association [www.stroke.org](http://www.stroke.org)

## Top-Down Approach

- Use occupation-based models to guide evaluation and intervention.



## Evaluation- Occupational Profile

In all practice settings;

- Initiate discussions regarding return to work
- Establish & document a comprehensive Occupational (Worker) Profile.
  - Employment Status, type of work, work history, value/satisfaction with work, goals related to work.
- Include return to work goals in treatment plans



## Evaluation- Job Analysis

- Need to understand the physical, cognitive, social, and emotional demands of the job.
  - Client description
  - Job description from place of employment
  - Use of job data base (O\*NET)
  - Work site visit
- Must ensure a match between client abilities, the job activities, AND the work environment. Examples;
  - Job Performance Measure (Kaskutas & Seaton, 2008)
  - Worker Role Interview (Braveman et al., 2005)
  - Work Environment Impact Scale (Moore-Corner, Kielhofner, & Olson, 1998)

## Evaluation-Client Factors/Performance Skills

Use non-standardized & standardized ecologically valid assessments

Examples;

- Executive Function Performance Test (Baum & Edwards, 1993)
- Complex Task Performance Assessment (Wolf, Morrison, & Matheson, 2008)
- Assessment of Work Performance (Sandqvist, Tornquist, & Hendriksson, 2006)
  - Evaluation of 14 skills (motor, process, communication/interaction) while performing work activity
- Job simulations
- \*Assessment Battery (O'Neill & Wolf, 2010)
  - Constructs assessed; perceived work ability, QOL/Life Satisfaction, Activity Participation, Fatigue, Depression, Social Support

## Evaluation-Worksite/Employer

- Assess physical and social work environment
- Contact employer
  - Written job description
  - Viability of return to work
  - Openness to modifications/accommodations as needed
  - Education/support needs
  - Availability of “real world” work activities/tools
  - Openness to work-site visits and work trials
- Transportation requirements

## Intervention-Client Factors & Performance Skills

- Education
  - Potential impact of stroke on work
  - Laws, regulations, and resources to protect rights, benefits, and support RTW
  - Healthy habits and routines that can support RTW
- Occupation-based
  - Simulated work activities & environments
  - Use of real world work activities
  - Work trials
- Training
  - Coping skills and emotional regulation
  - Compensatory strategies for executive dysfunction
  - Use of assistive technology & devices
  - Modified techniques/accommodations

## Intervention-Worksite & Employer

- Employer/employee education, support, & collaboration
  - Consultation regarding worksite & job modifications/accommodations
  - On-site work trials/job coaching
- Evidence to support that OT services that involve the work-site have better return to work outcomes than those that just take into consideration job requirements<sup>11</sup>

## Intervention-Advocacy

- Facilitate client self-advocacy
- Advocate for receipt of relevant services
- Advocate for reimbursement of services
- Advocate for reasonable accommodations
- Advocate for enhancing/establishing return to work services

## Addressing Return to Work Across the Continuum

- Stephanie, 31 years old mother. Suffered a stroke while driving her 4 year old to dance class. Experiences visual, motor, & cognitive impairments; exacerbated by stress.

National Stroke Association [www.stroke.org](http://www.stroke.org)

## Acute Care

- Educate & Advocate
  - Interdisciplinary education & collaboration
  - Request OT evaluation for ALL stroke admissions
  - Initiate conversations about return to work
  - Educate client/family on potential impact of stroke on work
  - Educate client/family on work related laws & resources
  - Include return to work goals in treatment plan
  - For clients being discharged directly home, recommend referral for outpatient occupational therapy services

## Subacute & Inpatient Rehabilitation

- Obtain information about job-related tasks
- Evaluate fit between abilities and demands
- Utilize simulated or real world occupations/activities
- Advocate for services

## Outpatient Services

- Use top-down “occupation based” models
- Address return to work early on; “occupation as end”
- Evaluation-client, job duties, \*worksite/employer
- Intervention-
  - Compensatory strategies
  - Collaborate with employer re: reasonable accommodations (must be in writing)
  - Performance Patterns (facilitate habits & routines that support work)
  - Physical fitness program
  - Multidisciplinary collaboration
  - Referral for Driving Evaluation (as needed)

## Perceptions of Best Practice

- ✓ Address RTW in the early stages following stroke
- ✓ Advocate for relevant services
- ✓ Refer ALL stroke survivors for comprehensive OT services
- ✓ Complete comprehensive & ecologically valid evaluations
- ✓ Provide occupation-based practice
- ✓ Address emotional regulation and coping skills
- ✓ Evaluate executive function and train in compensatory strategies and assistive technology use
- ✓ Provide employer focused interventions
- ✓ Develop enhanced competencies

Scott & Bondoc (2015)

## Reimbursement Mechanisms

- Mark, suffered a massive stroke
- “ I learned words I had only vaguely heard of before. Words like therapy—physical, speech and something called occupational.”

National Stroke Association [www.stroke.org](http://www.stroke.org)

## Common CPT Codes

- **97530 Therapeutic activities**, direct (one on one) patient contact (use of dynamic activities to improve functional performance)
- **97532 Development of cognitive skills** to improve attention, memory, problem solving, (includes compensatory training), direct (one-on-one) patient contact
- **97537 Community/work reintegration training** (e.g., shopping, transportation, money management, avocational activities and/or work environment/modification analysis, work task analysis, use of assistive technology device/adaptive equipment)

## Reimbursement

- **Private Insurance-**
  - If OT benefits, RTW services often covered; if not, advocate. Some common CPT codes may not be covered (92537 Community Reintegration; 97532 Development of Cognition)
- **Worker's Compensation-**
  - Likely no coverage issues
  - Always require MD Rx & pre-authorization
- **Medicare/Medicaid**
  - Reimbursement low
  - Medicaid sometimes requires pre-authorization
- **Tricare**
  - Coverage varies; retired vs. active duty
  - Usually pre-authorization required

## Laws & Regulations

- Kendall, 28 years old. Suffered a stroke at age 20 secondary to pulmonary embolism
- “Employers are not responding well to my vision impairment even though I try my best. I have been discriminated against for just simply trying to go back to work...”

National Stroke Association [www.stroke.org](http://www.stroke.org)

## Laws and Regulations

- **Family & Medical Leave Act 1993**-unpaid job-protected leave for up to 12 weeks/year; continuation of group health benefits. May be taken all at once or intermittently. Certain criteria must be met. \*Employee must apply for. <http://www.dol.gov/whd/fmla/employeeeguide.htm>
- **Short or Long Term Disability**
- **Americans with Disability Act 1990**- prohibits discrimination and requires employers to provide reasonable accommodations. <http://www.ada.gov/> and <http://askjan.org/links/adalinks.htm#l>



## Laws and Regulations

- **Social Security Disability Insurance (SSDI)/ Supplemental Security Income (SSI)**  
[www.socialsecurity.gov](http://www.socialsecurity.gov)
- **Ticket to Work and Work Incentive Improvement Act (1999)**  
[https://www.ssa.gov/legislation/legis\\_bulletin\\_120399.html](https://www.ssa.gov/legislation/legis_bulletin_120399.html)

## Alternate Health Insurance Considerations

- **Consolidated Omnibus Budget Reconciliation Act (COBRA)** health benefit provisions- may be expensive
- **HIPAA**- right to special enroll in spouse's health plan if previously declined without waiting for open enrollment.
- **Health Insurance Marketplace** (Marketplace)-Losing your job-based coverage is also a special enrollment event [HealthCare.gov](http://HealthCare.gov)

## Federal & State Services

- **Vocational Rehabilitation Services**  
<http://askjan.org/cgi-win/TypeQuery.exe?902>
- **American Job Centers**-nationwide network of employment services sponsored by the US DOL; may be able to help train for different job.  
[www.servicelocator.org](http://www.servicelocator.org)

## Resources

- Rose, multiple stroke survivor. Experienced 1<sup>st</sup> stroke while out with friends.
- “The most challenging process was reclaiming who I was...I was lost in a maze of medication, low self esteem, and absolute confusion.”

National Stroke Association [www.stroke.org](http://www.stroke.org)

## Resources

- **2016 Red Book**- free guide (English & Spanish) published by the Social Security Administration; summarizes employment support for person's with disabilities under SSDI & SSI  
<https://www.ssa.gov/redbook/>
- Examples of employment support programs
  - Ticket to Work Program
  - Trial Work Period

## Resources

- **O\*NET OnLine**- Free on-line database with descriptors of hundreds of occupational titles  
<https://www.onetonline.org/>
- **Job Accommodation Network** <https://askjan.org/>
- **National Stroke Association**-free resources for employees and employers.  
<http://www.stroke.org/we-can-help/survivors/living-stroke/lifestyle/returning-work-after-stroke>

## Disability Friendly Employers

- **Disaboom Jobs**- on-line listing of employers providing job opportunities for person's with disabilities. <http://www.disaboomjobs.com/>
- **Federal Government** <https://www.usajobs.gov/>

## AOTA Resources

- **Position Paper**
  - Occupational Therapy's Perspective on Use of Environments & Contexts to Facilitate Health, Well-Being, and Participation in Occupations (2015)
- **Statement**
  - Occupational Therapy Services in Facilitating Work Performance (2011)
- **Fact Sheets**
  - Work Rehabilitation
  - Returning to Work with Cognitive Impairments
  - The Role of Occupational Therapy in Stroke Rehabilitation

## AOTA Resources

### Special Interest Section Quarterlies

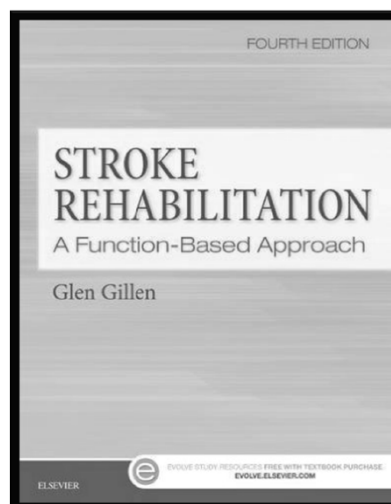
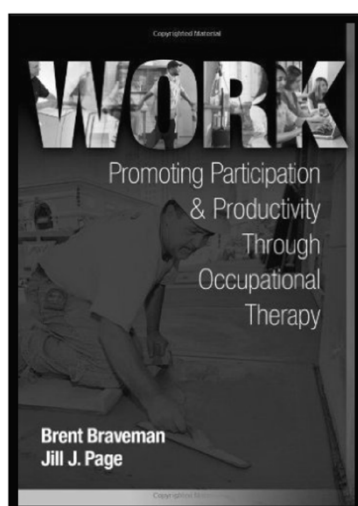
#### ▪ Work & Industry

- Fowler. (2013, March). Addressing the Work Performance of Individuals with Mild Stroke.
- Kaskutas. (2011, June). Addressing Work in Occupational Therapy
- Matheson, Dodson, & Wolf. (2011, March). Executive Dysfunction and Work: Tying it all Together.

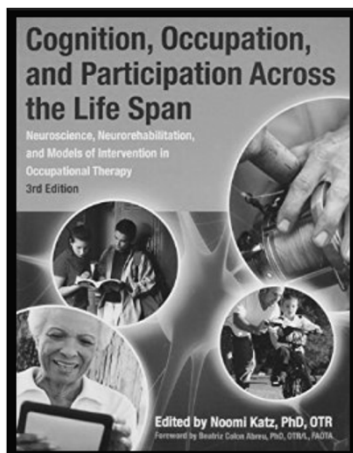
#### ▪ Physical Disabilities

- Scott & Bondoc. (2015, September). Occupational Therapy's Distinct Value for Stroke Survivors: Facilitating Return to Work Across the Continuum of Care.

## Books



## AOTA Press



Practice Guidelines



## Predictors of Return to Work

- Tyrone, married 51 year old. Severe left stroke while preparing to go to bed. Told his prognosis would not be good. Received therapy & back to work and coaching high school basketball at 4 months.

National Stroke Association [www.stroke.org](http://www.stroke.org)

## Factors Related to the Impact of Stroke

- Severity of stroke & subsequent impairments<sup>10</sup>
- Independence in ADL's<sup>10</sup>
- Independence in functional mobility<sup>20</sup>
- \*Depression<sup>21</sup>
- \*Executive dysfunction<sup>22</sup>
- \*Fatigue<sup>5,10</sup>

## Factors Related to the Person

- Intra-personal & psychological factors<sup>10</sup>
  - Positive attitude
  - High self-efficacy
  - Acceptance of disability
  - Flexibility
- Coping Skills<sup>10</sup>
- Realistic Goal Setting<sup>10</sup>
- Motivation<sup>10</sup>
  - Early motivation secondary to fear of loss of employment & benefits<sup>2</sup>
  - If guidance or support not received, motivation wanes with time<sup>5</sup>

## Factors Related to the Environment & Context

- A match between capabilities and the demands of the job<sup>10</sup>
- Type of employment<sup>10</sup>
- Size of employer organization<sup>24</sup>
- Work culture (support, flexibility, openness to accommodations)<sup>25</sup>
- Multidimensional support (especially \*employer)<sup>10,25</sup>
- \*Rehabilitation services that include the employer and work-site<sup>11</sup>

## Economic Factors

- Availability of health insurance<sup>10</sup>
- Number of years until retirement<sup>10</sup>
- Difference between employment income & disability income<sup>10,16</sup>
- Fear of loss of disability if return to work efforts fail<sup>16</sup>
- Socioeconomic status<sup>23</sup>



## Overcoming Barriers

- Rick, 47 year old married, father of two.
- Brain stem stroke while at work. One week acute care, 3 weeks inpatient, then discharged to outpatient services. Looking forward to returning to driving and starting a new career.

National Stroke Association [www.stroke.org](http://www.stroke.org)

## Overcoming Barriers



## Perceptions of Needed Competencies

- ✓ Understand work related laws, regulations, and resources
- ✓ Knowledge of variety of jobs, job demands, and ways to research job demands
- ✓ Ability to perform “job analysis” that includes both physical AND social work environment.
- ✓ Ability to engage in multidisciplinary and multi-service collaboration
- ✓ Ability to collaborate with client’s employer
- ✓ Critical reasoning abilities re: RTW readiness and employer viability
- ✓ Ability to advocate for needed services and reimbursement of services

Scott & Bondoc (2015)

## Take Home Points

- Janice, a 63 year old neonatal nurse. Suffered a stroke while grocery shopping with her son. Evaluated by therapies but deemed “normal”. “I stayed home from work for 3 months...I start back in two days!!”

National Stroke Association [www.stroke.org](http://www.stroke.org)

## For the Practitioner

- ✓ Address early and during all stages of recovery
- ✓ Advocate for receipt of services for ALL clients
- ✓ Consider “occupation as an end”
- ✓ Enhance competencies & services
- ✓ Focus on the work-site & employer collaboration
- ✓ Collaborate/network with experienced intra/interdisciplinary practitioners

## For the Survivor

- ✓ Promote self-advocacy for services & resources
- ✓ Facilitate early and consistent communication with employer
- ✓ Promote self-advocacy for benefits and accommodations
- ✓ Consider alternatives (as needed)

## For the Organization

- ✓ Establish and advocate for policies/procedures that support provision of return to work services
- ✓ Enhance/develop multidisciplinary return to work services
- ✓ Establish collaborative community partnerships

## Practice Implications

- OTP's report using "occupation-based" models however, practice patterns show bottom-up approaches predominate<sup>9</sup>
- Entry-level education & professional development needs
- Enhanced advocacy
- Alternate models of service delivery
- Further research; effectiveness of occupation based interventions; alternate models of service delivery

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### Stroke Treatment Across The Care Continuum

<http://www.occupationaltherapy.com/general/stroke-awareness-month-virtual-conference>

<b><u>Mon 5/16</u></b>	<b>Stroke Recovery and OT Implications within the Continuum</b> Salvador Bondoc, OTD, OTR/L, FAOTA
<b><u>Tues 5/17</u></b>	<b>Taking the Mystery Out of Mastery in Stroke Rehabilitation Practice</b> Robert Ferguson, MHS, OTR/L
<b><u>Wed 5/18</u></b>	<b>Neural Priming for Post-Stroke Upper Limb Hemiparesis</b> Mary Stoykov, PhD, OTR/L
<b><u>Thur 5/19</u></b>	<b>Occupational Therapy's Role in Managing Functional Implications of Visual and Cognitive Impairments</b> Lisa Rivera, MS, OTR/L
<b><u>Fri 5/20</u></b>	<b>Facilitating Return to Work after Stroke across the Continuum of Care</b> Shannon Scott, OTD, OTR/L