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Mechanisms that matter in stroke rehabilitation

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Stroke association

Overview

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- Implementation of evidence based stroke rehabilitation in a hospital setting
- Mechanisms underpinning delivery of stroke rehabilitation
- Realist Evaluation
- Collaborative Partnership synergy
- Approached to facilitating improvements

The REVIHR Study

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- Provision of in-hospital rehabilitation in the UK less that in Europe and not always evidence based
- Explore how stroke patients spend their time in stroke rehab units
- Capture amount of time spent practicing Activities of daily living
- Explore how staff divide their time
- Capture mechanisms that drive delivery of stroke rehabilitation

Sample: Four stroke units

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	Site 1	Site 2	Site 3	Site 4	totals
Physiotherapists	3	3	2	2	10
Occupational therapists	2	1	1	1	5
Speech & Language therapists	0	1	0	1	2
Rehab/therapy assistants	0	0	1	1	2
Nurses	3	3	3	4	13
Stroke consultant	0	0	1	1	2
Health Care Assistants	2	0	0	0	2
Commissioner groups Stroke Association	1 0	1 1	1 0	0 0	3 1
Totals	11	9	9	10	40

The REVIHR Study

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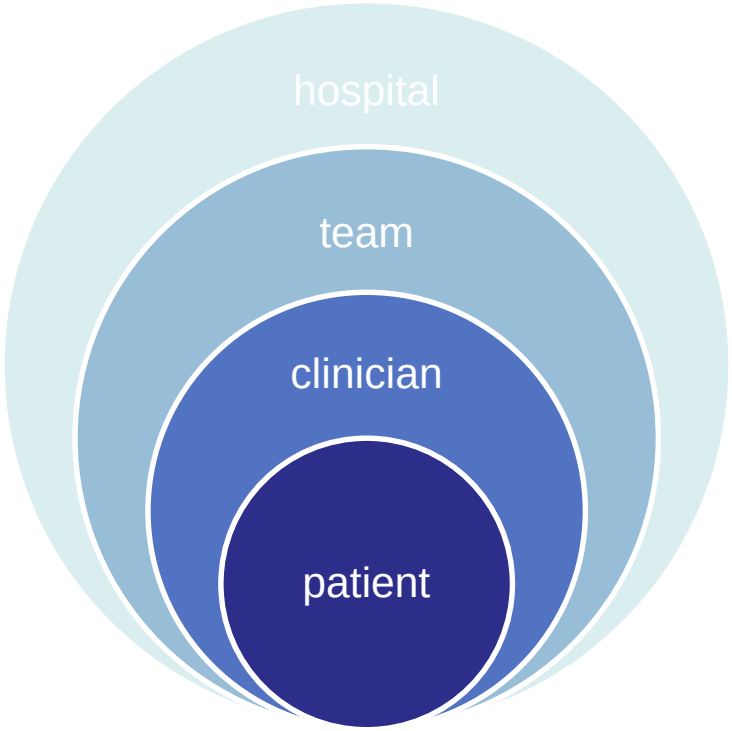
- Realist Evaluation
- **C**ontext: conditions in which interventions are introduced
- **M**echanism: how effects are achieved through reasoning or resources
- **O**utcome: intended or unintended consequences of interventions
- In a certain context, mechanism is triggered, to produce an outcome



Programme theory

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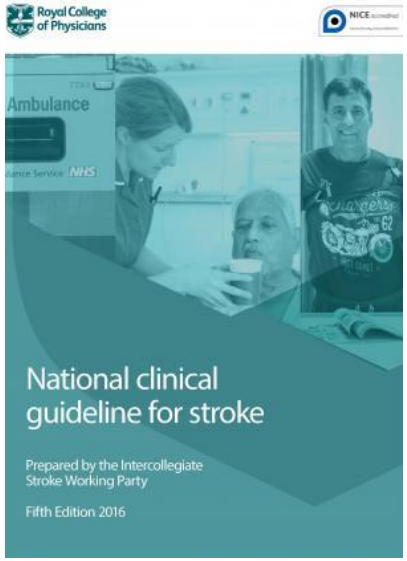
- What works, for whom in what circumstances?
- Co-ordinated multidisciplinary rehabilitation
- Team meetings at least weekly to plan care
- Effective leadership
- Staff with specialism in stroke/ rehabilitation
- Regular programmes of education and training
- **Independence in daily living**
- Intensity of therapy, Goal setting, Resources



Independence in daily living

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CMO [20] Patient groups

Context: stretched therapy staff

Mechanism: offering group sessions e.g. breakfast club; practice ADLs in social setting

Outcome: Patients receive rehab specific to their therapeutic needs; patients practice routines of daily living

"The key thing is, the more you practice something in a different context, the better it's going to be. We do as well as we can to facilitate that. And that's why we do our group work"

CMO [59] Skill transfer

Context: Morning toileting routine; Time & resources

Mechanism: In washing/dressing, rehab assistants transfer handling and mobility skills to nurses

Outcome: Patient given opportunity to practice ADL; Nurses develop therapy handling skills to enhance patient rehab

"I would put a rehab assistant in each bay in the mornings, just to promote that therapeutic work…working alongside the nursing staff to do transfers out of bed, to help the patients wash; to make it all therapeutic "

Treatment for identified problems associated with ADLs offered by OT with whole MDT

Trained members of specialist multidisciplinary team to assist patients in self-care practice

CMO [82] Rehab cross-over

Context: nursing pressure and staffing levels; patient rehab planning

Mechanism: toileting patient at bedside; speeds up nursing tasks

Outcome: patients miss out on opportunity to practice ADLs

"OTs make sure the white boards are up to date. If a patient can walk to the bathroom with one, sometimes a commode will be brought, which shouldn't be."

CMO [75]Training among specialisms

Context: time pressures; discontinuity in rehab focus

Mechanism: risk of untrained staff transferring and mobilising patients

Outcome: therapist reluctant to step up transfers outside of therapy; patients given less opportunity to practice ADLs

"We're trained to move a patient in a certain way, but we need to think about how a nurse can do it ….because of the lack of experience"

Independence in daily living

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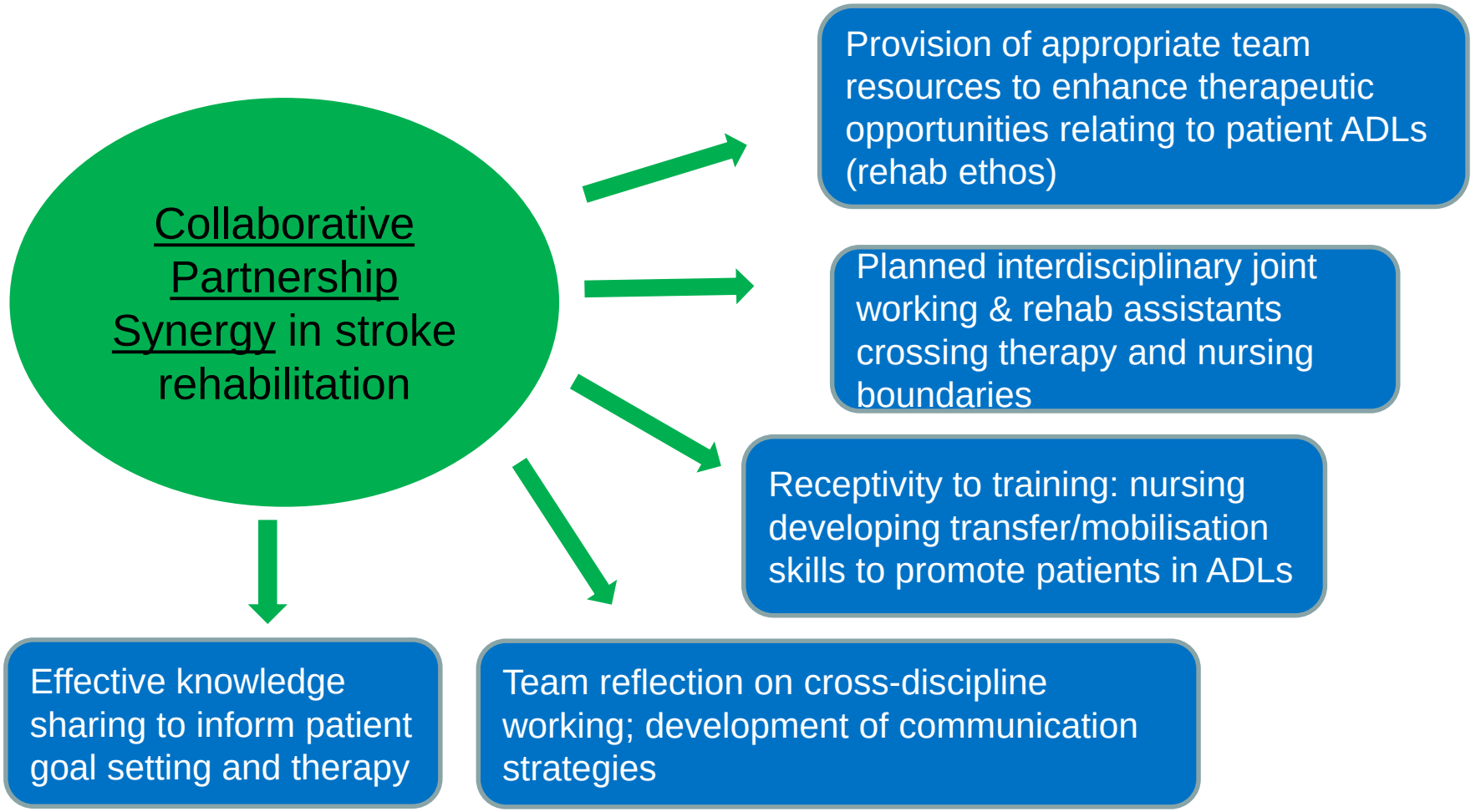
Stroke guidelines say…
- ADL incorporated into all MDT interaction with patients
- Use of rehab assistants for more face-to-face treatment
- Encouragement of patients' family and carers to be involved in rehab
- Training nurses to actively promote patient practice of ADLs

Facilitatory
- Multi-therapy group sessions
- Rehab assistants & boundary working
- Joint sessions
- Opportunity to practice ADLs beyond sessions
- Formal/informal training of nursing staff
- Involvement of carers & family

Counterveiling
- Lack of MDT training in stroke care
- Lack of co-ordination of therapy input
- Time pressure and nursing tasks/routines
- Loss of continuity in promoting ADL practice
- Burden of admin/documentation
- Patient fatigue and therapy

Collaborative partnership synergy



Lasker et al 2001. Partnership Synergy. The Millbank Quarterly 2001; 79(2):179-205.

Improvement activities

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Mechanisms driving evidence based stroke rehabilitation delivery

Lessons learned at each site: feedback discussions

Partnership working with key stakeholders on specific improvement activities

- Morning routines: breakfast and dressing
- Therapy/nurse cross-boundary working
- Increased ADL practice; promotion of rehab ethos

- On-the-job facilitation: reflection, training, communication
- Evaluation: process measures, staff and patient perspectives

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The National Institute for Health Research (NIHR) Collaboration for Leadership in Applied Health Research and Care East Midlands (CLAHRC EM) is a partnership between Nottinghamshire Healthcare NHS Foundation Trust and the Universities of Nottingham and Leicester.

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