Improving MDT meetings in stroke rehabilitation: findings from the GMASTER project

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MDTs are recommended

One of the mechanisms for superiority of specialist stroke care over generalist services

An effective MDT can enhance
• decision-making and co-ordination of care
• communication and trust between professions
• Improve service quality
BUT

Very little on

- how an effective team operates
- how to improve operation
- what (objective) impact MDTs have on team function and patient outcomes
Aim of G-MASTER project (Greater Manchester Assessment Toolkit for STrokeE Rehabilitation)

• Explore how stroke rehabilitation MDTs operate

• Develop an intervention to improve practice

• Evaluate the impact on team function and patient outcomes

• Worked with all the stroke rehab teams in Manchester (n=10)
We undertook

Non-participant observations of MDT Meetings and semi-structured staff interviews in the rehab units

- What was discussed, how
- What decisions made, how
- Progress monitored
- Documentation used
- Measurement tools used
- Communication within and outside the meetings
- Staff opinions – what's good, bad, could be improved, how
Manchester MDT Meeting Model (M4)

THE CONTEXT
Venue/ facilities; model of service delivery; staff resources; other meetings/ team processes

MEETING INPUTS
- Personal contribution of team members
- Meeting structure and organisation

MEDIATING PROCESSES
- Leadership and chairing style
- Team / social climate

MEETING OUTPUTS
- Info exchanged
- Decisions and plans made
- Actions allocated
- Progress and completion monitored and reviewed

Attributes of successful meetings
Meeting Inputs:
Contribution of team members

- Attendance
- Punctuality
- Active contribution
- Preparation
  - know patients
  - complete assessments
  - actions
Inputs:
Meeting Structure and organisation

- Agenda
- Specific documentation
- Use of standardised measurement tools
- Goal setting
- Action planning with specific people and time scales
- Reviewed progress
- Nature of the talk
  - Objective language > anecdotes
  - Patient > profession focussed
  - Respectful and co-operative
  - Stick to the point
  - One conversation at a time
  - Little repetition or contradiction
  - Staff follow the conversation
Mediating Processes: leadership & chairing

Effective teams - + ve team climate
Leadership & chairing: Ineffective teams
Meeting outputs and attributes

- Information exchanged
- Decisions and plans jointly made
- Actions allocated
- Progress and completion monitored and reviewed

- Comprehensive/holistic
- Patient focussed
- Objective
- Relevant
- Timely and completed
- Accurate, succinct and consistent
- Respectful
Developed the M4

- Formalised agenda including
  - introduction
  - review of actions
  - assessment or review impairments and activity using standardised measurement tools
  - statement or review of patients’ goals
  - plans for treatment and discharge,
  - actions allocated to a specific person with date for completion

- Standardised documentation to support and record discussion and decisions

- Toolkit of standardised measurement tools

- Guidelines for successful conduct of the meetings
Evaluation of impact of the M4

- Cohort study
- Assessed MDT meeting performance and patient outcomes for 3 months before and after implementation of the M4

- Data collected through
  - non-participant observations of weekly MDT meetings
  - staff interviews at each site
Outcomes

Patient outcomes
- length of stay
- discharge on destination
- change in Barthel Index score

MDT meetings performance assessed against pre-defined criteria covering
- The venue,
- Attendance
- Punctuality
- Preparation
- Chairing
- Communication
- Use of standardised measures (G-MASTER)
- Documentation
Meeting performance before & after M4

P<0.002
No significant differences
Mean change in Barthel Index

Before M4

After M4

P=0.038
Discussion and conclusions

An evidence-based structured model for MDT meetings and the use of standardised measurement tools (M4 and G-MASTER)

- Can improve performance of MDT meetings in stroke rehabilitation
- May improve patient recovery without increasing length of stay or reducing productivity

- **BUT** cohort design → risk of bias
- Other changes may have affected outcomes - Period of change +++
- Randomised trials needed
Acknowledgements
Further info

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Tyson et al (2010). Clinical Rehabilitation 24;74-81
Tyson et al (2007). Disability & Rehabilitation 30;2;142-144
Implementing the M4

- Project champion in each site
  - Liaison between research and clinical team
  - Driver of change in practice

- Full time project manager
- Senior management buy-in
- All of Manchester’s teams
- Evidence-based
Implementation techniques

- Process mapping
- Action planning
- PDSA (Plan, Do, Study, Act) cycles
  - Test of change; process normalisation theory
- On-going monitoring of uptake, review, revision