Using audit & feedback to change practice: embedding clinical practice guidelines in acquired brain injury rehabilitation

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Acknowledgements: Natasha A. Lannin received support from the Victorian Transport Accident Commission through the Institute for Safety, Compensation and Recovery Research (ISCRR) to conduct this research.

Background

Acknowledged gaps occur between clinical practice guideline (CPG) recommendations and clinical practice. Studies outside of rehabilitation suggest audit and feedback is an effective behaviour-change intervention, however rehabilitation studies with limited numbers of audit-feedback cycles have demonstrated only minimal improvements in adherence to audit criteria.

Our aims were to evaluate the effects of a sustained program of audit-feedback on therapists' adherence to acquired brain injury (ABI) rehabilitation CPGs; and increase the use of evidence in clinical practice.

Method

Using a periodic service review method, inpatient rehabilitation care was audited fortnightly for 46 weeks (61 cases) against ABI rehabilitation CPGs (137 observable criteria), using medical record review, observation, and staff, patient and family interviews. Each fortnight, a facilitator-led multidisciplinary feedback session provided clinicians with a summary of observed adherence to CPGs, and positive behaviour feedback strategies were used to encourage clinicians to assess and adjust their performance. Three months after withdrawal of the audit-feedback, 20 randomly selected cases were audited to determine if adherence to CPGs was maintained.

Results

Immediately following the intervention, there was a significant improvement in adherence to CPG criteria from 47% to 82% (35% improvement, 95% CI 25 to 46) (p=0.0001). Three months after intervention withdrawal adherence was lower and reduced to 73% (9% reduction, 95% CI -19 to 0.5) (p=0.002).

Adherence to CPG	T2 (%, 95% CI)	T3 (%, 95% CI)	T2 – T1 (%, 95% CI)	T3 – T2 (%, 95% CI)
Roles & responsibilities	98 (96 to >100)	77 (68 to 85)	68 (55 to 78)	-22 (-31 to -12)
Goal setting	98 (96 to >100)	71 (57 to 85)	58 (34 to 74)	-25 (-41 to -7)
Medical records	100 (100 to 100)	100 (100 to 100)	57 (39 to 71)	0 (-6 to 8)
Family education	68 (61 to 74)	54 (48 to 60)	56 (48 to 64)	-14 (-23 to -5)
Personal care regimes	79 (68 to 90)	84 (75 to 91)	49 (28 to 64)	4 (-8 to 18)
Continuity of care	99 (98 to >100)	90 (86 to 94)	48 (38 to 59)	-9 (-14 to -5)
Therapy interventions	85 (81 to 89)	78 (75 to 82)	45 (38 to 52)	-6 (-12to -0.6)

Findings show that intensive audit and feedback can improve adherence to rehabilitation CPGs. For sustainable change, audit and feedback needs to be incorporated into usual rehabilitation processes.