



Integrated Stroke Care in the Netherlands: Results of Self-Assessment Study among Regional Stroke Service Networks

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on behalf of Aligned Integrated Stroke Care Networks in the Netherlands

Dutch Regional Stroke Service Networks (2023/24)

Total number: 36
Response rate: 61%

Development Model for Integrated Care

Themes: 9
Items: 97

Implementation rates

Item level: 63.8%
Clusters below average: 3
Clusters above average: 6

Background

Integrated care is the leading paradigm to organise stroke care for providing person-centred care in all phases by all involved professionals and organisations [1]. To monitor integrated stroke care delivery and support its enhancement, most regional stroke service networks in the Netherlands participate in a self-assessment study performed by the Dutch Stroke Knowledge Network [2]. Insights from previous years [3] and this year aim to enable networks to further strengthen person-centred, integrated care delivery and improve health outcomes.

Methods

Coordinators of regional stroke care networks were invited to fill out an online self-assessment survey in 2023/24. The validated survey is based on the Development Model for Integrated Care and consist of 97 items, representing 9 themes [4]. Cluster scores indicate proportions of activities implemented to achieve integrated stroke service delivery. Data were analysed descriptively (mean±SD) and compared with data from previous years (2012, 2015 and 2019).

Results

Characteristics of Regional Stroke Service Networks:

Data were obtained from 22 regional stroke networks initiated between 1995 and 2016, with an average age of 16.7 ± 8.3 yrs. Networks consist of 9.6 ± 4.5 organisations. The smallest network counts 5 organisations, the largest 21.

Main findings:

- overall, networks implemented $63.8 \pm 18.9\%$ of items in 2023/24;
- on cluster level, 3 clusters score below average and 6 above. Networks are least active in 'Performance Management' ($55.3 \pm 26.9\%$) and 'Delivery System' ($55.8 \pm 21.2\%$), and most active in 'Inter-professional Teamwork' ($86.4 \pm 19.7\%$) and 'Roles & Tasks' ($84.7 \pm 20.0\%$);
- on item level, most challenging activities are sharing patient records (0%) and using incentives for continuous quality improvement (4.5%).

Conclusion

Dutch regional stroke service networks remain highly active in the provision of integrated care between 2012 and 2024. The results for 2023/24 are to a high degree comparable to 2019 and somewhat better than results from 2012 and 2015. To further improve the quality of stroke care, these study results can support coordinators of regional networks in overcoming barriers and sharing improvement strategies.

References

- [1] 69th World Health Assembly, 2016. https://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_R24-en.pdf?ua=1 (accessed 25 April 2024).
- [2] Buijck B, Vrijhoef B, Bergsma M, Dippel D. Auditing integrated stroke care to support quality improvement activities: development of a peer-to-peer audit framework. *J Integrated Care* 2022;30(2):160-171.
- [3] Voogdt H, Zonneveld N, Bergsma M, Van Wijk E, Kerckhoff H, Van der Dussen L, Kuijpers M, Vrijhoef HJM, Minkman M. Optimising Integrated Stroke Care in Regional Networks: A Nationwide Self-Assessment Study in 2012, 2015 and 2019. *Int J Integrated Care* 2021;21(3):12, 1-11.
- [4] Minkman MMN, Vermeulen R, Ahaus K, Huijsman R. The implementation of integrated care: the empirical validation of the Development Model for Integrated Care. *BMC Health Services Research* 2011;11(1):177.

Table: Activities implemented per domain and overall

Domain (items, n)	% of items implemented (mean±SD)	Domain (items, n)	% of items implemented (mean±SD)
Patient Centredness (10)	64.5±24.2	Inter-professional Teamwork (3)	86.4±19.7
Delivery System (18)	55.8±21.2	Roles & Tasks (8)	84.7±20.0
Performance Management (17)	55.3±26.9	Commitment (12)	66.7±20.1
Quality Care (7)	57.8±20.9	Transparent Entrepreneurship (7)	64.9±21.5
Result-focused Learning (15)	67.0±20.6	All together (97)	63.8±18.9