

Impact assessment of clinic management interventions on efficiency in three headache centers



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Objective

Past research has shown that headache centers' capacity is highly saturated and as a result patient access can be limited. The objective of this study is to investigate whether selected changes in clinical practice can improve efficiency and mitigate capacity constraints.

Methods

Type of study: retrospective analysis / case study of selected interventions implemented by three headache/ neurology centers.

Sources: retrospectively data were collected from internal centers' databases both immediately pre (point in time differs in the three centers, because of the different interventions implemented) and post-intervention implementation (November 2018).

Analysis: key performance indicators (KPIs) related to patient access to care and clinic management were measured to assess intervention impact.

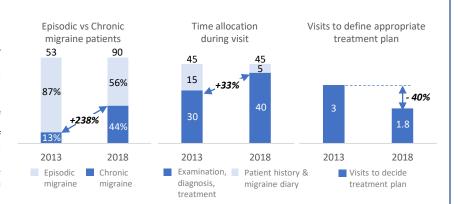
Results

Case 1: Patient referral and triage efficiency

(Hoofdpijncentrum Zeeland Terneuzen - NED)

Neurologist designed a comprehensive database of all patients with primary headache history, questionnaires were emailed and completed by patients pre and post visit. Administrative personnel performed triage (patient prioritization) based on internal guidelines.

→ Advance patient data collection allowed more appropriate patient triaging, ensuring clinics focused on chronic migraine patients (+238%); effectiveness of first visits improved as more time (+33%) was then able to be dedicated to examination, diagnosis and treatment instead of data collection; fewer visits were required to define appropriate treatment plan* (from 3 to 1.8).

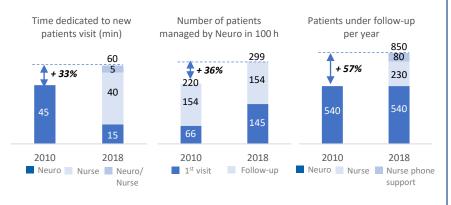


Case 2: Task delegation to headache nurse

(Neurological Inst. Mater Hospital, Dublin - IRL)

A clinical nurse specialist (CNS) who received tailored training is now responsible for several key activities such as headache history taking, neurological examination and compiling relevant investigations. The CNS works together with the Neurologist to implement a management plan for patients. Nurse provides also follow-up visits for less severe patients and phone based support, freeing up Neurologist time in order to review additional patients and reduce waiting lists.

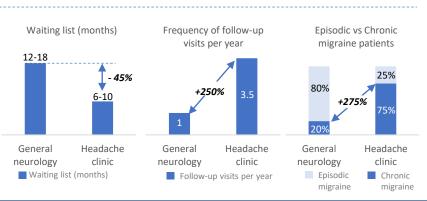
→ Task delegation to specialized nurse increased time dedicated to new patient visits (+33%), allowed Neurologists to see more patients (+36%), increased follow-up patients under management (+57%).



Case 3: Set-up of a dedicated headache clinic in a general neurology department

(Sunshine Coast University Hospital, Birtinya - AUS)
One half-day weekly specialized headache clinic is run
by one Neurologist and one general practitioner (GP)
along with two nurses supporting administrative
activities.

→ Opening of a weekly specialized clinic with support of a GP decreased waiting list for headache patients by 45%, increased the proportion of chronic patients under management (from 20% to 75% of total migraine population) and the frequency of follow-up visits per year (from 1 to 3.5 on average).



Conclusions

Past literature has shown a significant need to improve access to specialized care for migraine patients. In resource-constrained environments, selected interventions can improve practice efficiency and ultimately increase patient access to headache services. Measurement of selected KPIs helps ensure interventions' impact is verified and maintained over time.

References: Management of Migraine and the Accessibility of Specialist Care – Findings from a Multi-national Assessment of 28 Healthcare Networks.

1. Hoofdpijncentrum Zeeland, Terneuzen, Netherlands

2. Dublin Neurological Institute Mater Misericordiae Hospital, Dublin, Ireland 3. Neurology department Sunshine Coast University

Hospital, St. Albans, Australia 4. Novartis Pharma AG, Basel, Switzerland 5. Novartis Ireland Limited, Dublin, Ireland 6. Novartis Australia Pty Limited, Sidney, Australia 7. LSC LifeSciences Consultants, Milan, Italy

^{*}Adjustments to treatment plan may happen in future follow-ups according to patient response