# Dementia multi-disciplinary meeting pilot project

## Background

The NHS Long Term Plan states that 'we will go further in improving the care we provide to people with dementia' and has highlighted the need for joined up, coordinated care and inter-Trust collaboration.[1]

Diagnosing dementia can be complex, particularly for young-onset cases and atypical dementias. Multidisciplinary discussion is often required yet memory service access to neurology and neuroradiology input is often limited and ad hoc.

In June 2018 the NICE dementia guideline was updated and now recommends that if the diagnosis of Alzheimer's disease is uncertain, clinicians should consider either cerebrospinal fluid examination or FDG-PET[2]. Nuclear medicine-based imaging techniques are also recommended in hard-to-diagnose cases of frontotemporal dementia (FTD) and dementia with Lewy bodies. Genetic testing may be needed in some patients with Alzheimer's disease, FTD or vascular dementia. The vast majority of memory services do not offer all of these investigations but it is essential that patients have access to them where appropriate.

Currently, in South West London, there is a quarterly meeting where the five memory services can discuss cases with a cognitive neurologist and neuroradiologist. This was only set up through goodwill and networking and infrequency of the meetings can delay clinical decisions.

## Aims and Objectives

The aim of the project was to trial a monthly multidisciplinary meeting of memory services, cognitive neurology and neuroradiology to discuss complex and younger cases.

Objectives

- Review clinical effectiveness of monthly multidisciplinary meetings
- Review the cost effectiveness of monthly multidisciplinary meetings
- Establish the most effective multidisciplinary meeting structure though PDSA cycles

## Multidisciplinary meetings

The Dementia Clinical Network (NHS England and Improvement, London Region) funded sessional time (1 PA per month) for a cognitive neurologist and a neuroradiologist to attend the monthly meetings. The five memory services from South West London and St George's Mental Health NHS Trust (SWLSTG) were invited to attend the meetings.

Four meetings were held from February 2019 to June 2019 (a meeting was not held in April 2019).

Clinicians presenting cases sent a list to the neuroradiologist one week prior to the meeting to ensure scans were available to be reviewed (some scans required transfer from surrounding acute hospitals through the image exchange portal). It was the responsibility of the presenting clinician to record the outcome of the discussion in their clinical notes.

Information was collected at the end of each meeting to evaluate what went well and not so well. PDSA cycles were used to establish the most effective meeting structure.

Data was also collected on cases presented and the outcomes of the multidisciplinary discussion

## Outcomes of the Project

### Case presentations

The total number of cases presented in the pilot project was 42; the average number of cases presented per meeting was 11 and varied from 5 to 16. Most of the cases (88%) were presented by a memory service (the remainder were brought for discussion by the neurologist) and 21% of the cases presented were under the age of 65.

In most of the cases (95%) the presenting clinician had a query about the diagnosis and in 88% of the cases the clinician presenting the case wanted to establish if neuroimaging findings supported the clinical impression.

### Multidisciplinary discussion

All three professionals (neurologist, neuroradiologist and memory service psychiatrist/nurse) were involved in discussing around half of the cases (47%). When only two professionals were involved in the case discussion it was mostly the memory service clinician and the neuroradiologist (88%).

### Outcome of the discussion

In half the cases (21), the discussion led to a firm diagnosis being made where the clinician had not achieved a final diagnosis following clinical assessment. Of these 21 patients, in 16 it was concluded that the person had dementia and the subtype was also confirmed; 10 Alzheimer's disease, 4 FTD and 2 vascular dementia. One person was diagnosed with mild cognitive impairment and in four cases it was concluded that the patient did not have dementia.

In three further cases the previous diagnosis was changed; one subtype was changed from Alzheimer's disease to vascular, one non-dementia changed to a new diagnosis of frontotemporal dementia and in one case dementia unspecified was changed to Alzheimer's disease resulting in the patient being offered a cholinesterase inhibitor.

In two cases the scan had been reported as normal; on review in the meeting it was abnormal and supported a dementia diagnosis. In two cases an unnecessary MRI was avoided and in two other cases it was concluded that an MRI was required (where the patient had already had a CT scan). In one case the patient was referred on for a specialist investigation (cerebrospinal fluid examination).

In four cases discussion facilitated a referral to neurology, in one case genetic testing was discussed and deemed not appropriate and in two cases patients were going to be considered for a clinical trial following the discussion.

### Meeting Structure

The meeting location was due to be rotated to support services from a wide geographical area to attend. However, the necessary facilities were not available at Queen Mary's Hospital (Roehampton), therefore all meetings were held at St George's Hospital.

The time allocated for meetings was 2 hours, meeting times varied from 1 hour (when fewer cases discussed) to 90 minutes. 90 minutes gave sufficient time for case discussion and learning opportunities.

A discussion was held about remotely joining meetings; however, memory services are unable to view scans at their team base or office, which is integral to the meeting discussion. If the services were able to view images e.g. via a PACS system, then meetings could be held remotely via a conference call or "skype" service.

Some cases were presented on behalf of other members of the team who were not able to attend; in these cases, a full multidisciplinary discussion was not possible, and diagnoses were not finalised.

### Learning opportunities

There was significant learning for all disciplines. Learning discussions included when to perform imaging, what features to look for on scans, effects of medication and comorbidities, and psychiatric symptoms

Viewing and discussion of scans improved understanding and interpretation confidence, but it was felt that this learning might not be embedded as memory services cannot view scans locally. It was also felt that there was created a missed opportunity to show patients their scan as part of explaining the diagnosis.

### Other feedback from clinicians

The meetings were felt to be very valuable from a clinical and a learning perspective. Although neurologists were not involved in discussing all patients, it was felt very valuable to have their input in the meetings. Neurologists also gained advice from neuroradiology and psychiatry during the meetings. The impact of the memory service personnel who had seen the patients being discussed not being able to attend was highlighted and it was felt that a bimonthly meeting would be more likely to achieve full attendance.

## Conclusions

Monthly multidisciplinary meetings between memory service clinicians, neurology and neuroradiology enabled effective clinical case discussions leading to diagnoses being finalised or revised, appropriate use of investigations, patients being referred appropriately between specialists, facilitation of patients accessing research and learning opportunities for the clinicians who attended.

Cost savings could not be established due to the small sample size. However, the meetings were clinically effective; in a majority of cases the diagnosis was finalised or changed, in some cases investigations were re-interpreted, avoided or appropriately selected, and some patients were selected for onward referral or research opportunities.

## Recommendations

- SWL STP to facilitate SWLSTG memory services gaining access to PACS to enable them to view scan images. This will likely involve portal access to acute hospital IT systems
- London Dementia Clinical Network to share the learning of this project across London STPs and nationally.

Future meetings:

- Once services have access to PACS, remote meetings should be explored to minimise the impact of travel time and support memory services across SWLSTG to attend
- Meetings should be held monthly or bimonthly. If they are bimonthly, then a mechanism for ad hoc advice should be established. If meetings are held monthly then a minimum of 90 minutes should be allocated
- Funding for future meetings should be further discussed; it is inequitable to fund neurologists to attend the meeting and not memory service staff
- Other locations for meetings across the SWL footprint should be considered, e.g. Kingston Hospital

[1]The NHS Long Term Plan (2019) https://www.longtermplan.nhs.uk/publication/nhs-long-term-plan/
[2] NICE (2018) Dementia: assessment, management and support for people living with dementia and their carers https://www.nice.org.uk/guidance/ng97