Background to the audit:
NICE guideline CG42 (Dementia: supporting people with dementia and their carers in health and social care) recommends structural brain imaging in most cases of suspected dementia to help exclude other cerebral pathologies and help establish subtype. Referrers rely on relevant information in the written report to assist their overall clinical assessment.

Standard:
Report addresses the absence/presence of alternative cerebral pathologies and gives pertinent positive/negative findings to contribute to establishment of subtype.

Temporal lobes
The feature least addressed in the reports were the temporal lobes. Evaluation of medial temporal lobes structures can be assisted by coronal multi-planar reconstruction (MPR) perpendicular to the long axis of the hippocampus.

Indicator:
Performance against a six point rating scale. Each feature awarded one point if addressed in the report:
- Intracranial mass
- Hydrocephalus
- Atrophy
- Infarct
- Temporal lobes
- Microangiopathy

Target:
100% of reports achieve six points.

Methodology:
Analysis of reports on 50 consecutive outpatient CT head studies performed for dementia assessment since January 2017 found through search of CRIS database. Assessed against a six point scale informed by NICE CG42 and published literature.

Action plan:
Create short code within CRIS to generate a list of the six points to be addressed in the report. This will act as an aide memoire to ensure these are all commented on.

Re-audit 3 months after creation of CRIS short code.

Feature to be addressed | Addressed (% of cases)
------------------------|----------------------
Atrophy                 | 98                   
Infarcts                | 86                   
Microangiopathy         | 84                   
Mass                    | 76                   
Hydrocephalus           | 60                   
Temporal lobes          | 40                   

Conclusion
Most people developing dementia have brain imaging. A CRIS short code may assist in maximising communication of pertinent findings. Use of MPR can assist evaluation of temporal lobe structures. Imaging findings can contribute to the clinical diagnosis of dementia subtype. This has implications for choice of drug therapy, modification of vascular risk factors and improves understanding of the illness for patients and carers.

References: