Models of Dementia Assessment and Diagnosis: Indicative Cost Review
### Models of Dementia Assessment and Diagnosis: Indicative Cost Review

This report identifies and reviews in detail three models of dementia assessment and diagnosis currently being used in dementia care in England. It presents indicative costs for each model, benefits for patients and carers, key messages and considerations about developing the service, giving insight to how a local Clinical Commissioning Group might approach a review of their local services with an aim to making improvements.

### Action Required

To take note of the guidance contained in the document and use as appropriate to review and make improvements to services.

### Contact Details for further information

Older People's Mental Health and Dementia Team

England.DomainTeam@nhs.net
Document Title Models of Dementia Assessment and Diagnosis: Indicative Cost Review

Version number: 1

First published: September 2015

Prepared by: NHS England

Classification: OFFICIAL

The National Health Service Commissioning Board was established on 1 October 2012 as an executive non-departmental public body. Since 1 April 2013, the National Health Service Commissioning Board has used the name NHS England for operational purposes.
Contents

Foreword ........................................................................................................................................... 5
1. Introduction ................................................................................................................................... 6
2. Context, background and purpose ............................................................................................. 6
3. Approach ..................................................................................................................................... 8
4. Models .......................................................................................................................................... 9
   A. Gnosall Surgery – A primary care managed service with specialist outreach ................................................................. 9
   B. Northumberland, Tyne and Wear NHS Foundation Trust Memory Protection Services for Sunderland, Gateshead and South Tyneside Locality – a specialist care led service with primary care support .......... 18
   C. Rotherham, Doncaster and South Humber NHS Foundation Trust – an entirely specialist led service ............................................................ 27
5. Conclusion .................................................................................................................................... 33
6. Appendices .................................................................................................................................... 34

Appendix A: Review of alternative models of care for dementia assessment and diagnosis ................................................................................................................................. 34

Appendix B: Reviewing the model of care for dementia assessment and diagnosis: a five step approach ........................................................................................................................................... 40

Appendix C: Acknowledgements and contact details .................................................................... 46
Appendix D: Gnosall Patient Stories ............................................................................................... 48
Foreword

We are working harder than ever to improve dementia care, to make England more understanding of dementia, to find out more about the condition and to find new treatments which delay onset, slow progression or even cure dementia.

There is still much more to be done as we look ahead to the next five years and the challenges that need to be tackled. People with dementia have told us what is important to them and informed by these outcomes, the Prime Minister has set his vision to create a society where every person with dementia, and their carers and families, from all backgrounds, walks of life and in all parts of the country, receive high quality, compassionate care from diagnosis through to end of life care. This applies to all care settings, whether home, hospital or care home, where the best services and innovation delivered in some parts of the country are delivered everywhere with more consistency of access, care standards and less variation.

As we start to implement our plans for the next five years, in line with the Five-Year Forward View and the Prime Minister’s 2020 Challenge, we will all be looking for best practice and new ways of providing good diagnostic and post-diagnostic support services. This report provides a snapshot in time of three models of dementia assessment and diagnosis currently being used in dementia care in the NHS in England. It presents indicative costs for each model, benefits for patients and carers, key messages and considerations about developing the service, giving good insights into how a local Clinical Commissioning Group (CCG) might approach a review of their local service with an aim to making improvements in their current practice.

We want the person with dementia, alongside their carer and family to be at the heart of everything we do. Their wellbeing and quality of life must be uppermost in the minds of those commissioning and providing services and we should continue to strive to improve the offering we provide them. Please use this report, which we have commissioned NHS IQ to pull together, for guidance and inspiration to do so.

Alistair Burns
National Clinical Director for Dementia
1. Introduction

Dementia is recognised as an overarching term for a collection of symptoms that may include loss of memory, loss of spatial awareness, thinking difficulty and other symptoms that result in damage caused to the brain by progressive disease.

This report identifies and reviews in detail three models of dementia assessment and diagnosis currently being used in dementia care in the NHS in England. Through semi-structured interviews with each unit it presents indicative costs for each model, benefits for patients and carers, key messages and considerations about developing the service, giving insight into how a local Clinical Commissioning Group (CCG) might approach a review of their local service with an aim to making improvements.

2. Context, background and purpose

Dementia has an enormous impact on our society today. Recent figures from the Alzheimer’s Society put the number of people with dementia at 700,000+ in England, 835,000 in the UK in total at a cost of £26 billion. These numbers are projected to rise to 2 million by 2051.¹

In 2009, Living Well with Dementia – A National Dementia Strategy² set standards for dementia services, with the intention that all people living with dementia and the people who care for them should have the best possible healthcare and support. One of these standards sets out the need for good quality diagnosis and intervention for all.

Three years later the Prime Minister’s Challenge³ identified a key ambition to build on the progress of the National Dementia Strategy and to make a real difference to the lives of people with dementia. A significant commitment was made to help drive improvements in health and care through increasing awareness of, and referral to, memory clinics for assessment. The quantified ambition for national diagnosis rates was that two-thirds of people estimated with dementia in England should have a diagnosis with appropriate post-diagnosis support by 2015.

By February 2015 diagnosis rates were reported to have been improved nationally by 17 percent. Building on the improvements reported within the scope of the Prime Minister’s Challenge, the new Prime Minister’s challenge on dementia 2020⁴ sets an ambition for England to become the best country in the world for dementia care and support, and for people with dementia, their carers and families to live.

¹ Dementia 2014: Opportunity for Change, Alzheimer’s Society, September 2014


³ Prime Minister’s Challenge, March 2012

⁴ Prime Minister’s challenge on dementia 2020, February 2015
In late 2013 Professor Alistair Burns, National Clinical Director for Dementia, and a small team visited approximately 10% of Clinical Commissioning Groups (CCGs) across England to discuss the current status of their dementia programmes, and to see what assistance could be given to help them deliver the national ambitions. The visits were mutually beneficial.

From these visits several CCGs requested detailed information about real alternate models of dementia assessment and diagnosis being used throughout the country, how the services worked, costs where available and how they might begin to benchmark, assess and improve their local practices.

Investigations were carried out into identifying good practice in successful models of assessment and diagnosis, from which three overarching types of service were identified. Simplistically, these fell into the following categories:

a. A primary care managed service with specialist care outreach

b. A specialist care managed service with primary care delivery

c. An entirely specialist led service.

The purpose of this report is to describe the three types of identified dementia assessment and diagnosis service, present a narrative and indicative costs associated with each model, and to provide a step framework that builds on the core Change Model and links to the NHS Improvement System.5

Within the step framework a CCG might begin to look at improving local services. The step framework can be found at Appendix B.

When developing or introducing the service review CCGs should also take into account the duties placed on them under the Equality Act 2010 and with regard to reducing health inequalities, duties under the Health and Social Care Act 2012. Service design and communications should be appropriate and accessible to meet the needs of diverse communities.


The target audience for this document is service commissioners, although people working in or running dementia assessment and diagnosis services may also find the information useful.

Each service has developed their model of assessment and diagnosis based on local circumstances and resources. Therefore this review does not lend itself to cross-model comparison of benefits or costs. The authors leave the readers to draw

5NHS Improvement System
their own conclusions about potential local improvements and hope that this
document proves useful as a source of inspiration.

The investigation and review of services focuses on the assessment and diagnosis
pathway. It is worth noting that a proportion of people who are referred to this
pathway are found not to have dementia. For example they may have a physical
illness or mild cognitive impairment. Although these patients are counted in numbers
of referrals and included up to the point of diagnosis, they do not continue along the
pathway and are not included there. Additionally, we have not specifically highlighted
services that relate to young onset dementia.

There is no particular model endorsed by this report. Each service does its own
various and ongoing evaluations. Where available, links are provided to further
information.

This report represents a particular point in time for each of the services. One key
feature of all three services is that they are dynamic, changing to improve and to
become more responsive to the populations they serve. Over time this will inevitably
alter the configurations referred to in this report.

3. Approach

This review has been co-produced with three NHS partners that have developed and
are managing the three identified models of dementia assessment and diagnosis.
Their services have evolved in conjunction with changes in their local health and
social care systems. One of the successes for all three has been flexibility to adapt
as local needs change, therefore, they continue to adapt and modify their services.
Where available some details have been provided about their planned future
developments.

The partners to this report are:

- Gnosall Surgery, representing a primary care based service with
  specialist input to the practice for diagnosis, medicine initiation and
  supervision and ongoing patient review

- Northumberland, Tyne and Wear NHS Foundation Trust, where
  secondary care contracts GPs with Special Interest (GPwSI) from
  primary care for diagnostic assessment and review

- Rotherham, Doncaster and South Humber NHS Foundation Trust,
  which is a self-contained specialist led assessment, diagnosis and
  follow-up service.

All potential participants were given a copy of the Project Brief and a template
required to enable an analyst to build indicative service costs based on actual
resource input. These documents can be found in Appendix A.

The selection of units was made through application and interview. The criteria
required that the service represented one of the three models identified in the Project
Brief, that the unit was able to meet the project time scale and able to provide the required data.

Our process involved both face-to-face and electronic communications, which we could not have carried out without support from the three units. They are acknowledged and their contact details are given in Appendix C.

In developing costs for this report our approach has been to use actual resource numbers and national tariffs to build indicative costs rather than to use actual operating costs. The primary reason is that there are elements of each model that may not be replicable in other areas. For example, where a voluntary employment or local pay arrangement has been made we felt it was important not to represent this as it is unlikely that others could come to a similar arrangement. Therefore we have used NHS Agenda for Change grades at mid-points to keep costs consistent and present a realistic assessment of what the service might cost to reproduce elsewhere.

Although we are not proposing a comparison of models, in developing the indicative costs we have made some assumptions. These are clearly noted in the cost sections of this document.

4. Models

A. Gnosall Surgery – A primary care managed service with specialist outreach

Service background and description

Gnosall Surgery is part of the Stafford and Surrounds Clinical Commissioning Group.

The surgery has a practice population of approximately 8,000 of which around 1,150 people are 65 years old or over.

Since 2006 the Gnosall Surgery has been operating a primary care memory service. This provides easily available assessment, early diagnosis and ongoing support within a primary care setting.

The ethos for this service has been to add specialist skills and knowledge from a consultant psychiatrist to the skills, knowledge and services available within the primary care team, thereby bringing the best of secondary care into the primary care service.

Responsibility for the ongoing care of the patient is shared between the GP and the consultant.

The allocation of time from the specialist to the practice of 8,000 is one 3.5 hour session on site every month and on-going availability via telephone between times.
Once a patient has been identified as having a memory problem that might need further investigation, the GP will conduct an initial review and arrange preliminary investigations. If the GP then concludes that further action needs to be taken, the patient will be referred to the monthly memory clinic at the Gnosall Health Centre.

The memory clinic is co-ordinated by an eldercare facilitator who is employed by the Gnosall practice. The role is specific to the memory clinic.

An eldercare facilitator can monitor the patient’s condition more closely than either the GP or the consultant is able to, thereby acting as a single point of contact for the patient and their carers and reducing non-attendance. The eldercare facilitator can also initiate a follow-up as soon as there is any sign of deterioration. This close attention to the condition of the patient can potentially help avoid an emergency admission through quick action should the patient’s health decline, as well as providing a key line of support to the carer / family.

Once the initial referral is made, the eldercare facilitator will meet with the patient to carry out a structured assessment that includes a clock test and the General Practitioner Assessment of Cognition (GPCOG). This assessment is generally conducted in the patient’s home.

Following the initial assessment the patient is generally given an appointment to attend the memory clinic at the health centre. There they will see a consultant psychiatrist and the eldercare facilitator and will be able to bring a carer / family member as well.

After reviewing available history and assessment information and interviewing the patient and carer / family, the consultant psychiatrist will decide if there is enough information to discuss the diagnosis and a future treatment plan. If not, a possible outcome of the visit may be further assessments, investigations or scans.

The consultant works from the Gnosall Surgery, following NICE guidelines and initiating and supervising any necessary therapy. However, principal responsibility for the patient remains with the GP.

A benefit of primary care keeping principal responsibility is that a patient record with both GP and consultant information also remains in primary care. The consultant updates the primary care patient records as necessary, as does the GP. Having the entire patient record available to the whole team close to the patient helps to inform and improve the shared decision-making for everyone.

Once a diagnosis is given and a treatment plan is in place, the eldercare facilitator acts as the key link between the patient and their carers and all other agencies throughout follow-up. This maintains continuity of care. The eldercare facilitator has extensive knowledge of services and support available locally for the patients and their carers.

Gnosall and the local GPs also offer an acute visiting service manned by rota to minimise acute hospital admissions. Although this is not strictly part of the
service for assessment and diagnosis of dementia, it is another important support service that has an impact on dementia patients and their carers.

On receipt of an emergency call (111 or 999) from a nursing home to the emergency services the GP acute visiting service may be asked to respond in place of an ambulance paramedic service. This level of response has been found to be suitable for situations involving minor falls, confusion or other non-life threatening conditions with 50% of the calls resulting in treatment at home instead of transfer to hospital. The service is currently being trialled in nursing homes where access to the service for nursing homes will become direct following evaluation.
Gnosall Surgery Memory Service Pathway

**PRE-PATHWAY**
Practice identifies patient or patient has a change in cognitive condition and wants referral.

**STEP 1**
Memory problem considered by GP in discussion with patient, family, in conjunction with history, contacts, treatments, etc.

Does there seem to be a memory problem that will benefit from further investigation and treatment?

**Y**

**STEP 2 & 3**
Patient is referred to eldercare facilitator who arranges home visit and completes structured assessment and GPCOG and clock test.

**N**

- Discharge - there is no need to proceed further
- Reconsideration by the GP may be suggested

**STEP 4**
Eldercare facilitator presents assessment results to GP for further care decision.

Does the patient meet criteria for dementia diagnosis?

**N**

- 20% physical condition GP deals with
- 30% MCI on watch/wait list. Eldercare facilitator assesses 6 monthly and patient given MCI info leaflet.

**Y**

**STEP 5 & 6**
Patient, carer/relative, consultant and eldercare facilitator attend memory clinic or have domiciliary visit and agree care plan including any further investigations.

**STEP 7**
GP and consultant agree shared care arrangements including prescribing.

**STEP 8**
Eldercare facilitator supports and liaises with patient to ensure delivery of treatment plan.

**STEP 9**
Treatment plan enacted by eldercare facilitator to involve other community and social care as appropriate. MDT can be requested for complex cases.

**STEP 10**
Patient review as required.

Eldercare facilitator acts as patient care coordinator throughout process and is also responsible for maintaining clinical records in the practice.
Service inputs, indicative costs and benefits

Service inputs and indicative costs

Estimated average cost per patient of the dementia diagnosis pathway
Gnosall Dementia diagnosis pathway costs

**Workforce costs of pathway**

<table>
<thead>
<tr>
<th>Step</th>
<th>Care facilitator - time in minutes</th>
<th>Cost per hour band 2 (£)</th>
<th>Clinician - time in minutes</th>
<th>Cost per hour clinician (£)</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>30</td>
<td>20</td>
<td>10</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Step 2</td>
<td>15</td>
<td>20</td>
<td>5</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Step 3</td>
<td>90</td>
<td>20</td>
<td>30</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>Step 4</td>
<td>90</td>
<td>20</td>
<td>30</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>Step 5</td>
<td>45</td>
<td>20</td>
<td>15</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Step 6</td>
<td>20</td>
<td>20</td>
<td>7</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Step 7</td>
<td>120</td>
<td>20</td>
<td>60</td>
<td>101</td>
<td>141</td>
</tr>
<tr>
<td>Step 8</td>
<td>30</td>
<td>20</td>
<td>25</td>
<td>101</td>
<td>52</td>
</tr>
<tr>
<td>Step 9</td>
<td>60</td>
<td>20</td>
<td>20</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Step 10</td>
<td>45</td>
<td>20</td>
<td>15</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>325</td>
</tr>
</tbody>
</table>

**Cost of tests per patient**

<table>
<thead>
<tr>
<th></th>
<th>Proportion of patients</th>
<th>Cost per procedure (£)</th>
<th>Average cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood</td>
<td>50%</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>ECG</td>
<td>25%</td>
<td>21</td>
<td>5</td>
</tr>
<tr>
<td>MRI or CT</td>
<td>50%</td>
<td>102</td>
<td>51</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>58</td>
</tr>
</tbody>
</table>

**Mileage**

<table>
<thead>
<tr>
<th>Av mileage per patient</th>
<th>Cost per mile (£)</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>0.45</td>
<td>13.5</td>
</tr>
</tbody>
</table>

**Total average cost of pathway per patient (£)** 396
**Additional resource assumptions**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GP time</strong></td>
<td>We have assumed that this pathway does not require any input from the GP i.e. no time required at any point of the pathway</td>
</tr>
<tr>
<td><strong>Average mileage per patient</strong></td>
<td>We have assumed on average the care facilitator needs to make three home visits and the average distance travelled is 5 miles. Therefore three return journeys results in 30 miles travelled on average per patient</td>
</tr>
</tbody>
</table>

**Cost Assumptions**

<table>
<thead>
<tr>
<th>Cost per hour clinician</th>
<th>Cost (£)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per hour band 6</td>
<td>103</td>
<td>PSSRU unit costs 2014 p259 - Consultant Psychiatric cost per contract hour</td>
</tr>
<tr>
<td>Cost per procedure</td>
<td>20</td>
<td>PSSRU unit costs 2014 p191 - Coordinator pay band 2</td>
</tr>
<tr>
<td>ECG</td>
<td>21</td>
<td>2013 reference costs</td>
</tr>
<tr>
<td>MRI or CT</td>
<td>102</td>
<td>National Schedule of Reference Costs - Year 2012-13 - NHS trusts and NHS foundation trusts, Diagnostic Imaging, Old Age Psychiatry - average of MRI and CT</td>
</tr>
<tr>
<td>Cost per mile</td>
<td>0.45</td>
<td>HMRC approved mileage rate (<a href="https://www.gov.uk/rates-and-thresholds-for-employers-2014-to-2015">https://www.gov.uk/rates-and-thresholds-for-employers-2014-to-2015</a>)</td>
</tr>
</tbody>
</table>
Benefits

Some benefits have been noted in the description of the service. Others are listed below:

- Delays for patients to be seen are minimised and attendance rates are nearly 100%. At least part of this is due to having the eldercare facilitator who develops a relationship of trust with the patients and their carers. Any changes in the patient's condition are quickly noted. Being able to concentrate this role specifically on memory services also enables the eldercare facilitator to become an expert on the availability of a wide range of appropriate local services and how to access them.

- Early identification of potential memory issues and developing a close partnership with the patient and their carer / family lends itself to identifying and treating multimorbidity and other conditions the patient may have.

- The surgery has identified 100% of the predicted prevalence for the population.

- Gnosall practice’s use of all secondary health care cost £450,000\(^6\) less per year than predicted for patients in this age band. Those who were admitted had a reduced length of stay. Most of the savings have come from the reduced need of acute hospital services. Additionally there has been less use of mental health services.

- Patients and carers / family report high levels of satisfaction. See Appendix D for patient stories.

- Managing the service in the familiar environment of the GP Health Centre helps reduce the fear and stigma that might be associated with attending a psychiatric clinic.

“I\textbf{Dementia is not exclusively reserved for the elderly}; \textbf{Janice is an example of that. As the care facilitator involved I saw a woman in the prime of her life who one can only assume must have been devastated by her diagnosis. Early intervention and treatment that is clearly working means a longer and better quality of life for both Janice and her loved ones to enjoy, together.”}

Planned changes, issues and key messages

Planned changes

Following the success of the Gnosall Memory Clinic model, it is being rolled out to the CCG federation of 163 GPs in 41 practices, with a total population of approximately 360,000. The anticipated costs are in the order of:

\footnotesize{\textsuperscript{6} House of Commons Health Committee, Managing the care of people with long term conditions, second report of session 2014/15
http://www.publications.parliament.uk/pa/cm201415/cmselect/cmhealth/401/401.pdf}
• £165,000 for six dementia facilitators
• £500,000 for memory clinics in primary care
• £25,000 for education
• £25,000 for care support
• £150,000 for housing support
• Pharmacy contract – MURs - £28 x 400.

Within the rolled-out service pre-diagnostic support, clinics and ongoing support services will be organised by eldercare facilitators. They will continue to have a peer support and advocacy role and will be recruited locally. Their training will be managed by a third sector end of life charity and they will be attached to the practices through honorary contracts.

The facilitators will work 1 hour per week per 1000 population. Several of them who have been recruited for the roll-out are retired healthcare professionals. It is anticipated that this paradigm will work well as it will give the facilitator an insight to the health aspects of the job as well as the maturity to support a vulnerable older population.

The patient will hold a copy of their care plan and it will travel with them on a data stick. It is easier to modify a care plan than to create a new one. Therefore, in the event of an inpatient episode, already having a care plan may help reduce length of stay.

In addition there will be 24-hour decision-making telephone support available for carers. It is planned that this will be offered through working with the third sector end of life care charity. There will also be urgent care call-out until 10pm.

The memory service will be supported by the “Health Fabric” software application7, which is available on a wide range of human interface technologies including mobile phone. The system supports integration with assistive technologies and records held on external systems.

The Health Fabric system is currently interfaced with the EMIS GP system. Another development is anticipated to be interfaces with other general practice systems.

Issues and key messages

Gnosall Surgery has maintained a good working relationship with its local mental health partnership trust and feels it is important to note that the service would not be nearly as effective without this.

7http://www.healthfabric.co.uk/index.html
A key message for commissioners and others looking at making changes to their dementia assessment and diagnosis service is to ensure that the proposed changes do not destabilise the Trust. The redeveloped service needs to maintain the principles of partnership and shared purpose.

It is also important that social care and healthcare is identified and planned at the beginning of the process rather than at the end. Inputs need to be defined against agreed outputs, not just driven by medics. The care planning process needs to support and meet the individual’s needs. Where social care is means-tested it has been found that tensions can arise with the patient’s family if they have pre-defined views of family wealth.

Some consideration of the data entry process is needed before establishing a similar service. Keeping all patient records in primary care could mean that there may need to be some duplicate data entry at the Trust. Duplication is not ideal and could increase the scope for errors.
B. Northumberland, Tyne and Wear NHS Foundation Trust
Memory Protection Services for Sunderland, Gateshead and South Tyneside Locality – a specialist care led service with primary care support

Service background and description

The Memory Protection Service (MPS) was commissioned in April 2012 as a diagnostic service for people of all ages who may have dementia. It is inclusive of all disabilities including learning disabilities. The aim is to provide local primary and community services to support early diagnosis and intervention for cognitive impairment.

The service was developed as an enhanced Primary Care diagnostic provision using GPs with Special Interest (GPwSI) to work alongside secondary care and provide the memory protection role for approximately 84,000 residents of South Tyneside, Gateshead and Sunderland.

The service provides a key access point to the dementia care pathway in each locality, ensuring that any contact or referral of a person with possible dementia is responded to appropriately. Either the carer or the patient will be transferred to appropriate services through the MPS if applicable.

Across the localities there are 155 GP practices of varying size. One of the challenges of developing the service has been negotiation about pathway transitions with three different localities and three different Community Mental Health Teams.

Prior to referring to the MPS, the patient’s GP is asked to complete a cognitive screening. Referrals, including self-referral for each locality are written or emailed from various sources such as liaison teams, intermediate care facilities and other primary care staff. Generally, the patient is informed that they have been referred.

All referrals are first screened at the MPS single point of access by one of the nurse practitioner duty workers who triage the referral. At this point a small number may be redirected to the secondary care Community Mental Health Team if it is apparent that the person’s needs are more complex than routine diagnosis. The duty workers are also responsible for initiating the pathway for self-referrals and if necessary, for managing further information requests in order for a referral to be allocated. The duty workers also respond to all other enquiries from service users, members of the public and GPs, and undertake all routine telephone reviews.

A nurse will do a full assessment with cognitive testing using the Addenbrookes Cognitive Examination, ACE-III. The patient will then see the

---

consultant and the nurse. The consultant might conduct a brief physical examination or assess mood or ask further questions. The consultant will explain initial findings and the intended plan at that point. The patient might be sent for a scan, other concerns discussed or a referral back to the GP made, for example in the event that the patient is depressed.

A letter is generated from the diagnostic assessment and the patient will get a copy. The default is that the patient gets a copy of all letters unless they have specifically said they do not want them. These will be the same as the letters the GP receives. All letters have been reviewed to make sure they are jargon free.

In accordance with current NICE guidance everyone for whom a diagnosis of dementia or borderline dementia is expected will have at least a CT scan, but they might also receive an MRI, DAPT or PET scan. The acute Trust completes the scans - the timeliness of the outcome response can be variable across localities.

Once all results and assessments are complete a diagnostic appointment will be offered with either a Consultant or GPwSI. The diagnostic appointment delivers the diagnosis supported by the scan results and other assessment information. Generally this will support what the Consultant has already provisionally agreed at the professional MDT.

At the diagnostic review, pre-diagnostic views are reconsidered and the patient’s symptoms reviewed to see if there have been any changes or additional risks. The diagnosis is delivered and treatment options discussed as well as support and local groups available, lasting power of attorney, driving, etc.

A comprehensive letter detailing the diagnostic review discussion is completed. It can then be used as a plan of care for the patient. The MPS also shares it as instructed by the patient.

If the patient is to start on medication, this happens at the diagnostic review. The duty nurse will phone the patient in three weeks to check the patient’s interaction with the medication. If indicated, the consultant will write a new prescription which is sent to the patient. Titration is managed through this contact. If the patient’s condition has changed or they are not tolerating the medication well, the patient will be brought in or seen in their home.

Twelve weeks after the diagnostic review all patients are offered a post diagnostic appointment with the nurse. At this point access to education and support groups are discussed and offered again. Should the patient decline the offer of group work they will be signposted to voluntary services within their locality for extra support and will be discharged back to the GP. At any point throughout the process if the patient deteriorates or is unable to tolerate medication, a review appointment will be offered with either the GPwSI or the consultant. An alternative care plan will be implemented which may include occupational therapy or psychology involvement.
There are two groups that patients may opt into; an education group for patients and their carers, which is a valuable early journey peer support system, and a “Coping with Forgetting” closed group run by the clinical psychologist with another member of staff just for patients themselves. There are six to eight places and the group meets for an hour and a half each week for six to eight weeks. The purpose of the group is to support the person to come to terms with the diagnosis of dementia.

All groups are evaluated and the outcomes are always positive. Groups have a steady flow of uptake throughout the year. The evidence is that people who attend the group adjust fantastically well.

Discharge is completed between nine to sixteen weeks should there be no complications throughout the process. The team are currently addressing areas that delay the process to ensure that the service is more efficient.

There is some scope to trim the length of the process, particularly with streamlining appointments for scans, psychology, etc. and contracting for more timely results.
Northumberland, Tyne and Wear NHS Foundation Trust Pathway

**STEP Pre-assessment**
Referral received from GP, primary care staff, liaison team, case finder, etc. Referral information chased if not complete. Diagnostic appointment scheduled or signposted if inappropriate referral.

**STEP 1a**
Diagnostic assessment with nurse and consultant. Clinic or domiciliary based. Patient leaves with an understanding of the next steps in relation to their care.

**Does there seem to be a memory problem that will benefit from further investigation and treatment?**

**STEP 1b**
No dementia diagnosed:
- Refer back to the GP
- If patient has more complex needs
  - Refer to CMHT

**STEP 1c**
Refer for further diagnostics and assessment, e.g. CT, MRI, DAPT, PET scans, OT, home assessment, neuropsychology assessment.

**STEP 2**
Once all results are received the patient has a Diagnostic Review with nurse and GPwSI or consultant. Care plan created. Meds started. Available support signposted.

**STEP 3**
Nurse contacts in three weeks to check tolerance.

Is the patient started on meds?

**STEP 3a**
Bring patient in for review or see at home.

**STEP 4**
12 week review. Group support explained.

Is patient joining group(s)?

**STEP 5**
Option 1
One-off education for patient and carer. MDT led

Option 2
Six to eight weekly group sessions “Coping with Forgetting”, covering legal issues, Advance Care Planning, etc. Agenda set by group. MDT led

**STEP 6**
Joining group 2?

Discharge back to GP and shared care. Membership model so return is quick if needed.

The referral path is ageless. Patients also have ongoing access to the service as required in the event there is concern about their condition.

Steps 5 & 6 are not strictly part of the assessment and diagnosis process. They are included for information because they are an integral part of the service pathway. Separate costing has been provided below.
## Service inputs, indicative costs and benefits

### Service inputs and indicative costs

#### Average workforce costs of pathway per patient

<table>
<thead>
<tr>
<th>Step</th>
<th>Nurse band 6 - time in minutes</th>
<th>Cost per hour band 6 (£)</th>
<th>Consultant - time in minutes</th>
<th>Cost per hour clinician (£)</th>
<th>Admin band 4 - time in minutes</th>
<th>Cost per hour band 4 (£)</th>
<th>GP with Special interest - time in minutes</th>
<th>Cost per hour GP (£)</th>
<th>OT - time in minutes</th>
<th>Cost per hour OT (£)</th>
<th>Clinical psych. - time in minutes</th>
<th>Cost per hour clinical psych. (£)</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>93</td>
<td>64</td>
<td>9</td>
<td>103</td>
<td>30</td>
<td>15</td>
<td>9</td>
<td>175</td>
<td>148</td>
<td>224</td>
<td>108</td>
<td>290</td>
<td>148</td>
</tr>
<tr>
<td>Step 2</td>
<td>63</td>
<td>64</td>
<td>32</td>
<td>103</td>
<td>45</td>
<td>15</td>
<td>32</td>
<td>175</td>
<td>224</td>
<td>30</td>
<td>108</td>
<td>290</td>
<td>224</td>
</tr>
<tr>
<td>Step 3</td>
<td>48</td>
<td>64</td>
<td>12</td>
<td>103</td>
<td>15</td>
<td>15</td>
<td>12</td>
<td>175</td>
<td>108</td>
<td>108</td>
<td>108</td>
<td>108</td>
<td>108</td>
</tr>
<tr>
<td>Step 4</td>
<td>63</td>
<td>64</td>
<td>17</td>
<td>103</td>
<td>45</td>
<td>15</td>
<td>17</td>
<td>175</td>
<td>16</td>
<td>32</td>
<td>55</td>
<td>138</td>
<td>290</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>771</td>
</tr>
</tbody>
</table>

#### Cost of tests per patient

<table>
<thead>
<tr>
<th>Proportion of patients</th>
<th>Cost per procedure (£)</th>
<th>Average cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scan</td>
<td>102</td>
<td>102</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>102</td>
</tr>
</tbody>
</table>
### Mileage

<table>
<thead>
<tr>
<th>Av mileage per patient</th>
<th>Cost per mile (£)</th>
<th>Total cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0.45</td>
<td>3.85</td>
</tr>
</tbody>
</table>

**Total average cost of pathway per patient (£)** 877

### Average workforce costs per patient of post diagnosis support groups

<table>
<thead>
<tr>
<th></th>
<th>Nurse band 6 - time in minutes</th>
<th>Consultant - time in minutes</th>
<th>Admin band 4 - time in minutes</th>
<th>Cost per hour band 6 (£)</th>
<th>Cost per hour clinician (£)</th>
<th>GP with Special interest - time in minutes</th>
<th>Cost per hour GP (£)</th>
<th>OT - time in minutes</th>
<th>Cost per hour OT (£)</th>
<th>Clinical psych. - time in minutes</th>
<th>Cost per hour clinical psych. (£)</th>
<th>Total cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 5</td>
<td>23</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>Step 6</td>
<td>108</td>
<td>64</td>
<td>18</td>
<td>103</td>
<td>0</td>
<td>15</td>
<td>108</td>
<td>138</td>
<td></td>
<td></td>
<td></td>
<td>395</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>419</td>
</tr>
</tbody>
</table>
**Resource assumptions:**

<table>
<thead>
<tr>
<th>Step 5 - groups</th>
<th>Assume 90% of people take this up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 6 - optional groups</td>
<td>Assume 60% of people take this up</td>
</tr>
<tr>
<td>Tests - scan</td>
<td>We have assumed that 100% of patients receive a scan and for costing purposes 50% are CT and 50% are MRI</td>
</tr>
<tr>
<td>Travel time</td>
<td>Each time travel is required we have assumed total travel time of 30 minutes</td>
</tr>
<tr>
<td>Average mileage per patient</td>
<td>We have assumed that a home visit is required for 10% of patients at steps 1-4. We have assumed each round trip is 10 miles.</td>
</tr>
</tbody>
</table>

**Cost Assumptions**

<table>
<thead>
<tr>
<th>Cost (£)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per hour clinician</td>
<td>103</td>
</tr>
<tr>
<td>Cost per hour band 6</td>
<td>64</td>
</tr>
<tr>
<td>Cost per hour band 4</td>
<td>15</td>
</tr>
<tr>
<td>Cost per hour GP</td>
<td>175</td>
</tr>
<tr>
<td>Cost per hour OT</td>
<td>32</td>
</tr>
<tr>
<td>Cost per hour clinical psych.</td>
<td>138</td>
</tr>
<tr>
<td>Cost per procedure</td>
<td>National Schedule of Reference Costs - Year 2012-13 - NHS trusts and NHS foundation trusts, Directly Accessed Pathology Services, Phlebotomy</td>
</tr>
<tr>
<td>Blood</td>
<td>4</td>
</tr>
<tr>
<td>MRI or CT</td>
<td>102</td>
</tr>
<tr>
<td>Cost per mile</td>
<td>0.45</td>
</tr>
</tbody>
</table>
Benefits

Some benefits are noted within the service description. Others are listed below:

The service:

- is available to any person requesting information, advice, support or signposting to other services and diagnosis and interventions, inclusive of all ages and other disabilities
- is available to all carers of people who may have dementia
- is directly accessible to the general public, through a single telephone number and through primary care
- supports a choice for people accessing the services to be assessed at home, in a local primary care centre or other appropriate place
- provides specialist tests such as MRI and CT scanning in a convenient and timely manner, close to home
- facilitates continuity of care through the GP, with specialist services supporting primary care clinicians to manage the person with dementia and their carer(s).

Planned changes, issues and key messages

Planned changes

The following are changes that are currently planned to develop the MPS:

- Collaborative working with voluntary sectors to support individuals following discharge
- Digital dictation
- Mobile solutions
- Scheduling management for all disciplines
- Addressing contracting of scans with all localities
- Improved administrative support
- Increased MDT resources
- Improving accommodation.

Issues and key messages

The leading issue has been the recruitment of GPs. Initially there were four GPs recruited, but one has now left. The GPs have limited time available for the MPS because they also want to continue their general practice. Limited time means that dementia-specific skills development is particularly difficult.
It has presented a challenge to ensure consultant supervision is available for the clinics that are being held in various community premises throughout the localities.

In the very early stages of dementia diagnosis is not easy and requires considerable skill. It is much more straightforward once a patient has a history of dementia and there is a more marked difference between dementia, mood disorders, mild cognitive impairment and even those who are not ill, but concerned about potentially age-related memory issues. There has been a ten-fold increase in the predicted referral rate to the MPS as a result of case finding and promoting the service. Not all referrals have been appropriate and with it being so early in the dementia journey many of the patients need considerable input to get to an appropriate diagnosis. Many patients need neuro-psychological assessment to reach a diagnosis and many referrals are for very young people under 25 years. The patients need a full battery of assessments to avoid misdiagnosis.

Issues have been found with the completion and quality of referrals. This can mean there is limited information around cognitive testing, recent bloods and the level of risk or detail around presenting problems. To mitigate against this the duty worker screens all referrals and will discuss with the multi-disciplinary team if appropriate.

A key message is that it is important to keep the balance between moving things forward quickly and also having time to prepare the patient and their carers / family. It is important to achieve balance rather than trade off. There may be a difference between what the professionals physically achieve and what needs to be done for good quality patient care.
C. Rotherham, Doncaster and South Humber NHS Foundation Trust – an entirely specialist led service

Service background and description

Rotherham, Doncaster and South Humber NHS Foundation Trust (RDaSH) is a major NHS provider of community and mental health services to people in Rotherham, Doncaster, North Lincolnshire, North East Lincolnshire and Manchester. The Trust’s memory service is developed, managed and delivered to a population of approximately 50,000 people of age 65 and over in Rotherham, Doncaster and North Lincolnshire, by a small team within the Older People’s Mental Health Services. Referrals come from 45 GP surgeries.

Although the memory service and other dementia services are part of RDaSH, they are not delivered in isolation. The Trust works in close partnership with other organisations throughout their area to deliver the best dementia services for the local population. Some of these are neighbouring Trusts, voluntary and not for profit organisations, CCGs, general practice and others.

The service has received accreditation through the Royal College of Psychiatrist’s Memory Service National Accreditation Programme (MSNAP).

In April 2014, RDaSH moved the memory provision from being a clinic to a service to assist a more personalised approach and responsiveness to increasing demand.

The memory service receives referrals via a Single Point of Access (SPA) specific to the Older People’s Mental Health division. The SPA has been in place for approximately ten years so is a mature and efficient service.

Referrals are made to the SPA by general practice after completing RDaSH’s referral protocol. The GP is expected to have carried out a screening assessment that includes the Six Item Cognitive Impairment Test (6CIT), an assessment of historic activity impairment and investigations to exclude other conditions that may mimic dementia. These will include comprehensive physical examination, blood work and urinalysis.

Once the referral and supporting information is received, SPA can begin to collate it and identify the most appropriate place to pass the referral on to. This may be either for specialist assessment or for SPA to provide advice to the referrer should there be no markers for dementia.

The Trust has worked hard to develop partnerships and close working with the local GP practices. Approximately 75% of the referrals SPA receives will be complete. However, the remaining referrals will have information gaps that can hold up the process.

Once the information is complete and SPA has considered it appropriate to pass the referral on for specialist assessment, the referral will go either to the Memory Service or to the Community Mental Health Team (CMHT). This will
be determined by SPA based on the complexity of the patient’s need, behavioural and psychological symptoms, risk factors, etc.

If the memory service is determined to be appropriate, the patient will be contacted on the same day that the referral is received. They will be scheduled in to the next available clinic. This may take as long as 28 days depending on when in the month the referral is received. However, contact has been made and the patient and their carer(s) have information to make contact with RDaSH should there be concerns in the meantime.

RDaSH prefers that the patient go in to clinic. If absolutely necessary they will arrange home visits. However, it is not ideal as at the clinic there is access to the supporting staff, tools and information that might be needed.

At the first visit to the memory service, an assessment is conducted by nursing staff and a specialist older age consultant psychiatrist. The diagnosis will be clarified and the patient considered for medication. The patient and their carer(s) / family will be given advice and information about support available.

Information gathered at the memory clinic assessment will be taken to a multi-disciplinary team where a baseline assessment is conducted. This will include a review of the available information as well as considering carer stress, social circumstances, social functioning and a comprehensive range of health and social concerns. This team will use the results of these deliberations to determine the appropriate cluster pathway for the patient.

RDaSH has been commissioned to use the Payment by Results Clusters to deliver a structured care plan for each patient in the Older People’s Mental Health Service. The memory clinic specifically delivers standard care for clusters 18 and 19; with cluster 18 representing the least complex care and delivering standard medication and titration, Cognitive Stimulation Therapy, advice and information, regular reviews and medicine management. Cluster 19 includes the entire cluster 18 plan, but also supports access to allied health professionals if required.
Rotherham, Doncaster and South Humber Memory Service Pathway

**STEP 1**
General Practice Screening Assessment
- 6 item CIT score 8 or above. History of impaired activities of daily living/functioning from patient and/or carer NB: if 6CIT score below 8 but persistent complaints of poor memory and depression is excluded, refer for specialist assessment.
- Exclude other conditions which may mimic dementia
  - Physical examination to exclude any physical condition that may be contributable to the dementia presentation
  - Blood screen including FCB, U&E, LFT’s, TSH, B12, glucose, folate, ESR, cholesterol
  - Urinalysis

**STEP 2**
Refer to Older People’s Mental Health Services Single Point of Access (SPA)
Monday – Friday 09.00 – 17.00 hours
Tel: 01302 796104
SPA collates information and identifies needs – for clarification of diagnosis, consideration for treatment with anti-dementia drugs, complex or multiple needs, dual diagnosis, behavioural and psychological symptoms (BPSD). Complex risk.

REFERRAL PASSED FOR APPOINTMENT TO BE ARRANGED

**STEP 3**
MEMORY CLINIC
- Clarification of working diagnosis.
- Consideration for treatment with anti-dementia drugs.
- Support and advice.
- Appointment within 28 days

EMERGENCY CMHT
- Mental Health Act
- Hospital Admission
- Crisis
- BPSD
- Emergency – for people who are at immediate and significant risk of harm to self or others as a result of mental illness.
- 4 hours

CMHT
- Multiple needs, clarification of diagnosis, consideration for treatment. Dual diagnosis. BPSD
- Urgent – for people who will, without rapid intervention, be at risk of significant deterioration in mental health or be at increased risk to self or others as a result of mental illness. – same or next working day.
- Routine – for people who are experiencing signs of mental ill health or dementia needing a full specialist assessment and consideration of treatment and care options – 10 working days.

**STEP 4**
BASELINE ASSESSMENT
- Considers health, well-being, medication, social circumstances, self-care, activities of daily living, social functioning and support, cognitive testing, service input, risk, physical screening (CT, bloods). Carer Stress. bio-opsychosocial assessment.

**STEPS 5 and 6**
DIAGNOSIS FROM CONSULTANT
- CLUSTER 18 CARE PLAN AGREED
  - Medication initiation and titration.
  - Cognitive Stimulation Therapy.
  - Advice and information. Regular review, medicines management.
  - MEMORY CLINIC (unless complicating factors prevent attendance)

- CLUSTER 19 CARE PLAN AGREED
  - Medication initiation and titration.
  - Cognitive Stimulation Therapy.
  - Advice and information, regular review, medicines management.
  - Access to O.T., physio, psychology if required.
  - MEMORY CLINIC (unless complicating factors prevent attendance)

- CLUSTER 20 CARE PLAN
  - Medicine initiation and titration.
  - Home support.
  - Advice and information. Regular review, medicines management.
  - MDT risk management, carer support. Inpatient care (when indicated).
  - CMHT

- CLUSTER 21 CARE PLAN
  - Medicine initiation and titration.
  - Home support.
  - Advice and information. Regular review, medicines management.
  - MDT risk management, carer support. Inpatient care (when indicated).
  - CMHT

YOUNG ONSET SERVICE
- Assessment and treatment for all patients under 65 years with dementia

SIGNPOSTING and NO FURTHER ACTION
SPA identifies no markers for dementia.
Advice to referrer.

REFERRAL PASSED FOR APPOINTMENT TO BE ARRANGED
### Service inputs, costs and benefits

#### Service inputs and indicative costs

#### Average workforce costs of pathway per patient

<table>
<thead>
<tr>
<th>Step</th>
<th>Nurse band 6 - time in minutes</th>
<th>Cost per hour band 6 (£)</th>
<th>Consultant - time in minutes</th>
<th>Cost per hour clinician (£)</th>
<th>Admin - band 2 - time in minutes</th>
<th>Cost per hour band 2 (£)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td>60</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Step 4</td>
<td></td>
<td>240</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
<td>64</td>
</tr>
<tr>
<td>Step 5</td>
<td></td>
<td></td>
<td></td>
<td>60</td>
<td>103</td>
<td></td>
<td>256</td>
</tr>
<tr>
<td>Step 6</td>
<td></td>
<td>120</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
<td>103</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>433</td>
</tr>
</tbody>
</table>

#### Cost of tests per patient

<table>
<thead>
<tr>
<th>Test</th>
<th>Proportion of patients</th>
<th>Cost per procedure (£)</th>
<th>Average cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood</td>
<td>100%</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>ECG</td>
<td>50%</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>CT</td>
<td>50%</td>
<td>67</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>48</td>
</tr>
</tbody>
</table>

#### Mileage

<table>
<thead>
<tr>
<th>Av mileage per patient</th>
<th>Cost per mile (£)</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>0.53</td>
<td>10.60</td>
</tr>
</tbody>
</table>

Total average cost of pathway per patient (£) **491**
### Additional resource assumptions

| Travel time | Each time travel is required we have assumed total travel distance of 10 miles (return journey) and assumed for each patient there are two home visits |

### Cost Assumptions

<table>
<thead>
<tr>
<th>Cost Assumptions</th>
<th>Cost (£)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per hour clinician</td>
<td>103</td>
<td>PSSRU unit costs 2014 p259 - Consultant Psychiatric cost per contract hour</td>
</tr>
<tr>
<td>Cost per hour band 6</td>
<td>64</td>
<td>PSSRU unit costs 2014 p190 - Community Nurse Specialist pay band 6</td>
</tr>
<tr>
<td>Cost per hour band 2</td>
<td>20</td>
<td>PSSRU unit costs 2014 p191 - Coordinator pay band 2</td>
</tr>
<tr>
<td>Cost per procedure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECG</td>
<td>21</td>
<td>2013 reference costs</td>
</tr>
<tr>
<td>CT</td>
<td>67</td>
<td>National Schedule of Reference Costs - Year 2012-13 - NHS trusts and NHS foundation trusts, Diagnostic Imaging, Old Age Psychiatry - CT</td>
</tr>
<tr>
<td>Cost per mile</td>
<td>0.53</td>
<td>Provided by Doncaster</td>
</tr>
</tbody>
</table>
Benefits

- Referral to a single point of access helps ensure speedy access to the most appropriate service, subject to the referral being complete.

- Once the patient has been referred to the memory service a single assessment is carried out. This means the patient only gets asked to give information once rather than at every step.

- As a specialist service contained within the trust, there is fast access to a range of other specialist services when required. Transitions are minimised which makes the process more efficient.

- A cluster approach to the care plan means that there is a clear, agreed care plan. Everyone then has clarity about the plan, process and services for the patient.

- There is continuing support and advice available following assessment to ensure clear understanding of the diagnosis and its implications and available ongoing support services.

Planned changes, issues and key messages

Planned changes

RDaSH is not unique in facing the challenge of increasing dementia prevalence and increased demand for their memory services. The Trust will continue to work in partnership with local agencies to deliver the ambitions of the National Dementia Strategy in the most efficient and effective ways possible.

The Trust continues to work to improve fast access to the dementia services, to work with and remains responsive to the needs of the patients and families it supports. Patient and carer / family involvement, support for care homes, reduction in waiting times and service responsiveness are all priorities for the Trust.

Issues and key messages

The Trust enjoys excellent ratings on their Patient Satisfaction surveys and feels that continuing to be excellent for its users is a key priority, as well as a challenge in an environment where there are increasing and competing demands.

A key message is trying not to over-complicate things. Over the years the Trust feels it has been able to sustain an excellent rating by listening to its patients and partner organisations and taking a pragmatic approach to service development.

Memory Clinic: “My brother and I were very happy with the way my mother was treated and diagnosed. They put us in touch with other organisations that could help – their initial help was a lifeline.”

Home visit from Memory Services: “The whole visit was spot on! My mum’s nurse practitioner was very informative and communicated with mum and us, her carers, with care and effect. It made the whole visit very enjoyable. I do not think you can improve on what we have experienced.”
5. Conclusion

The contents of this document describe actual models of dementia assessment and diagnosis that are currently being used successfully. It is not possible to predict how any of these models would work under a different set of circumstances, or if the indicative costs would be achievable in a different location.

This paper aims to be of practical support to commissioners. While there has been a focus on indicative costs, the quality elements and the diverse needs of patients must also be in mind when considering redesign of any service.

In designing, developing and implementing imaginative changes to their local services, each of the three units represented here were driven by the need to provide excellent, high quality care to the people they serve. Their passion for making things better for patients and carers comes across very clearly. We hope you recognise and are inspired by it.
OFFICIAL

6. Appendices

Appendix A

Review of alternative models of care for dementia assessment and diagnosis

Project Briefing

Introduction

The need for people to receive a timely diagnosis and better quality care and support forms part of the priorities outlined in the Prime Minister’s Challenge on Dementia. In support of this challenge the Government’s Mandate to the NHS outlines an objective to make measurable progress towards being among the best in Europe at diagnosing, treating and caring for people with dementia.

We know from recent discussions that many CCGs and service providers are seeking ways to improve the quality and costs associated with providing memory services. Increasing demand (through raised public awareness, national incentives and improved availability of support services), improved access and changes in workforce capacity and capability have led several to review their model of service provision.

In an effort to provide some practical information to enable CCGs to consider alternative models of assessment and diagnostic provision, NHS England, with support from NHS Improving Quality, will work with NHS partners to gather information and produce a report identifying some pathway options, some illustrative costs for each and the quantitative and qualitative data that that should be considered when reviewing service provision.

Project structure

The project is headed by NHS England and sponsored by Professor Alistair Burns, National Clinical Director for Dementia. A small task and finish group from NHS England and NHS Improving Quality has been convened to manage the work.

Project aim

To help commissioners’ understanding of cost considerations associated with alternative models of assessment and diagnostic care and provide commissioners with a practical framework for use when considering local service improvement.

The project will not provide an endorsement of any particular model of care.

Project scope

In scope

- To identify and describe three alternative models of assessment and diagnosis service provision
- To identify indicative costs associated with each model based on an example population and local demand. Indicative costs will cover those incurred across
primary and secondary care from the point of referral (GP, Care Home, Acute) to the end of the 1st year of follow-up.

- Qualitative and outcome data for each model including diagnosis rates, local prevalence, waiting time data with links to, or extracts from, any local evaluation of the service

**Out of scope**

- Drug costs
- Costs associated with post diagnostic support services.
- Cost benefit associated with savings to the wider economy

**Approach**

Three models of service will be explored. These are:

1) A mainly specialist led assessment and diagnostic service

2) A primary care led assessment service with specialist outreach to support diagnosis and follow up

3) Mainly primary care led assessment and diagnosis service with referral to specialist acute service for more complex cases.

**Project output**

A report for commissioners will include:

- A description of each model and associated indicative costs
- An overview of qualitative and outcome considerations
- Practical guidance for commissioners on a structured service improvement approach that could be adopted if and when planning a change in model provision.

Learning from this exercise will also be evaluated and used to inform future studies.

**Project methodology**

Following identification, selection and agreement, the project group will work with one site that understands and represents each of the three models. The work will be split into four phases:

1. Project set-up, site identification and agreements
2. Information and data collection, anticipated to be via a combination of site visits and electronic communications
3. Analysis and evaluation of findings
4. Report production, approval and distribution.
Key milestones

The following milestones are estimates only. They have been developed with a certain amount of generosity to take into account constraints of working through primary holiday season.

1. Finalise and approve project structure and documentation
2. Approach sites, agree involvement and distribute brief and questions
3. Set-up site visits and collate initial response from sites
4. Site visits and information gathering
5. Analysis of findings
6. Draft report
7. Sign off and distribute report

Known risks/constraints

- The project is predicated on the principles of co-production. It is assumed that agreement will be reached with partners about the information that will be shared and that people will be available to meet the schedule needed for information gathering. Should this not be the case, the project timetable will be at risk. This will be mitigated by all parties having access to contact details and agreeing a structure of escalation

- Keeping well within the timescale is critical to avoid publication restrictions generated from the 2015 General Election. This will be mitigated by rigorous monitoring
Dementia Diagnosis Service Model Review

Information Prompts

Please find below information prompts that will help ensure consistency across the models that are being reviewed. If there are one or more diagrammatic representations of the service, please also provide these as they will serve to speed the process of information gathering.

Demographics and context

- Service Location
  - E.g. urban, rural, city
- Population covered by the service
  - E.g. numbers, ethnicity
- Sources of referral (GP, Acute, care homes, self-refer)
- Local prevalence of dementia and local diagnosis rates where appropriate
- History of the service
  - E.g. when set up, process, catalysts, etc.
- Configuration of dementia services
  - Clinics per week
  - Appointments available per week
- Long term follow up approach
  - E.g. specialist or GP led and when transferred
- Active research that may impact this study
- Care homes
  - Who assesses and diagnoses?
- Numbers of people with dementia in care homes
  - Prevalence and diagnosis rates in care homes
- Type of contract(s) agreed for delivering the service
  - Where appropriate, what happens when threshold is reached?
- Local incentive schemes
Service provider

- Process map from point of decision to refer to one year following diagnosis.
  - For each step please identify the resources used
- Details about staff providing the service
  - Grades
  - Time required to deliver the step / service
  - Frequency of the provision
  - Any other considerations, e.g. mandatory training
- Roles of the multi-disciplinary team directly involved in assessment and diagnosis process
- Support services available through the service
- Management of mild cognitive impairment
- Number of referrals to the service per year
  - Referral criteria / protocol
- Patients seen per year
  - New
  - Follow-up
- Conversion rate to dementia / mild cognitive impairment / non-Alzheimer dementia
- Did not attend rates
  - New
  - Follow-up
- Tests
  - % referred for scans (CT or MRI)
- % referred for ECGs and/or other tests
- Any other service overheads or considerations, e.g. printing, travel

Outcome data

- How are patient experience and outcomes / quality measured locally? Please provide details of measures and data where available
• How is the impact or experience of the assessment process measured for patients and carers? Please provide details where available

• Waiting times for assessment and diagnosis

• Qualitative benefits of this model of care

Contact details

• Please provide appropriate contact details for the main contact for this project and an alternate in the event the main contact is unavailable. The purpose will be for us to clarify information and to set up site visit(s). Therefore, the main contact should be someone who can encourage participation and agree information for publication
Appendix B

Reviewing the model of care for dementia assessment and diagnosis: a 5 step approach

The following are suggested high level steps to use as a guide for considering a change to the dementia assessment and diagnosis service model. More in depth information and resources are available to support each step, with links and signposting to some of the available resources and tools provided in the Useful Resources and Tools section below.

Step 1: Select your team

Identify a team to support this work. The model of care selected may impact on time, costs, and manpower. Robust project management and a good, representative team will be needed to lead the review and development and to support implementation.

Your team should include representatives from all your stakeholder groups. There are several tools available through links in the Resource section to help you define who these groups are and how to manage your communications with them.

Suggested team members might include lead clinician(s), executive sponsor, project lead, specialist doctors, commissioners, provider leads, GPwSIs, patients and carers, specialist nurses, community mental health representatives, voluntary sector, social care, finance, analyst / information specialist, administration staff, allied health professionals, etc.

Think about:

- Governance arrangements
- Stakeholder analysis and communication plan
- Team working and team building
- Identifying and getting buy-in for your shared purpose.

Step 2: Gather current service information

Before making any changes it is important to fully understand the current memory service profile and clinical pathways for the whole community. Service location, activity data, performance indicators and pathway mapping will all provide useful information to review.

A good starting point may be to develop a Statistical Process Control (SPC) chart or a Pareto chart focussed on waiting times for the service. This will help you develop
your baseline, provides a clear improvement goal and is an easy way to show progress.

Process mapping the pathway from a service user perspective will help identify waits, bottlenecks and waste.

**Think about:**
- Existing protocols and pathways
  - Do they work?
  - Are they monitored?
- Sources and patterns of referrals, e.g. post code or GP related, seasonal, etc.
- Scheduling and activity flows, e.g. referrals, waiting times, conversion rates, wait for tests, etc.
- What users say, e.g. survey and satisfaction reports, Memory Service National Accreditation Service annual audit, GP views of the current service, etc.
- Workforce capacity, e.g. specialist nurses, clinical specialist time, care coordination, etc.
- Ways of working between organisations.
- Quality, e.g. care planning, advance care planning, equity of access, etc.

**Step 3: Develop options**

There may be a number of options available and each will need to be evaluated against cost and quality benefits and involve a range of stakeholders. Your evaluation will need to consider any impact on dependent and peripheral services.

One or more workshop events may be a good way to develop and evaluate the cost and quality benefits and agree the preferred option.

It is important that all options are given thorough consideration and a good record of the evaluation is kept. The first solution that appears to work may not necessarily be the best once all options have been considered.

**Think about:**
- Researching alternative models of diagnosis service that might be suitable to achieve your ambitions
- The enablers that will be required to support implementation, e.g. training, IT integration, capital and revenue funding, etc.

- How staff will be supported to safely deliver any new model of care, e.g. initial and ongoing training, competencies, mentorship, clinical supervision, etc.

- Capacity and responsibility for developing a care plan and being point of contact beyond diagnosis to end of life, e.g. numbers, competencies, role definition and flexibility, etc.

**Step 4: Plan and test your preferred model**

Your preferred model should be tested on a small scale before planning wider roll out. Testing can help you evaluate the potential success, scale of improvement, likely costs and impact of your model as well as helping you reduce opposition to the changes.

For example, if a specialist outreach model is selected you might test it with one or two practices and a limited group of people. It is strongly advised that you draw up a testing plan that clearly states what you are testing and for how long, testing objectives and expected outcomes, indicators of success, how, what and when you will measure, test duration and communications plan.

Try not to run your tests through and only reflect at the end. Reviewing and reflecting throughout the process of change can help you deflect issues. If the changes are not resulting in improvement be prepared to stop the testing and revisit your options.

**Think about:**

- Choosing people who are willing and able to support you with the testing
- How the change of service provision will be communicated to service users
- How scheduling systems will work
- What improvement data you will need as a benchmark and on-going collection to demonstrate the change has resulted in an improvement
- The time period for testing, how the testing will be evaluated and who will want to know
- Identifying metrics that will tell you if the change has resulted in an improvement
- These need to cover process, experience, quality and outcomes
Step 5: Review and roll out

Following a period of testing, reviews and evaluation that demonstrates that the change has made an improvement, a wider roll out should be considered.

If the change has not resulted in an improvement or the testing has not met the improvement objectives, the team will need to review the test results to understand the reasons. The team will need to make a decision about refining the option being tested or plan another test cycle. If further testing results in no improvement the team may wish to re-evaluate the options.

Once a change option has been successfully tested a programme plan needs to be completed for the wider roll-out. This may be broadly similar in content to your testing plan, amended by any changes and lessons gained from testing.

Business case approval may be required for your change. Guidance on completing the Business Case process is available from NHS England. Be sure to check if other organisations involved in the change will also need to complete some form of documentation.

Think about:

- Receptiveness for change in the wider community
- How the evidence base for change will be communicated, particularly to those who are less supportive
- Winning over hearts and minds
- Incentives and levers to support change
- The approach, e.g. a phased roll out or big bang
- The impact on funding and commissioning and alignment to the business planning process
- Key indicators that provide transparent data that monitor quality, experience, process and outcomes data across organisational boundaries
- Ways to support easy collection of data
- The mechanism for all users of the service to feedback views and experience and how these views will be acknowledged and addressed
- Sustainability of skills amongst workforce.
Useful resources and tools

- NHS Change Model

- Statistical Process Control
  www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/statistical_process_control.html

- Pareto Chart
  www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/pareto.html

- Thinking Differently, Lynne Maher, Paul Plesk et al
  www.institute.nhs.uk/building_capability/new_model_for_transforming_the_nhs/thinking_differently.html

- Quality and Service Improvement Tools: Driver diagrams, Process mapping, Measurement, etc.
  www.institute.nhs.uk/option.com_quality_and_service_improvement_tools/Itemid,5015.html

- Transforming participation in health and care

- First steps towards improving quality – a guide to improving services
  www.slideshare.net/NHSImprovement/first-steps-towards-quality-improvement-a-simple-guide-to-improving-services

- Bringing Lean to life

- Advance care planning – it all ADSE up

- Prince2 – Project Management, Managing Successful Programmes and other project management resources

- Training in dementia care. Dementia education is offered through various learning institutions. See the following examples:
  www.e-lfh.org.uk/programmes/dementia/
OFFICIAL

www.bradford.ac.uk/postgraduate/training-in-dementia-care/
www.mdx.ac.uk/courses/cpd/dementia-care-and-practice-graduate-certificate-postgraduate-certificate-169b719
www.worcester.ac.uk/discover/association-for-dementia-studies.html

- Memory Service National Accreditation programme (MSNAP) information for commissioners
  www.rcpsych.ac.uk/workinpsychiatry/qualityimprovement/qualityandaccreditation/memoryservices/memoryservicesaccreditation/informationforcommissioners.aspx

- Dementia Prevalence Calculator
  https://www.primarycare.nhs.uk(register.aspx

  Information about the calculator:
  dementiapartnerships.com/diagnosis/dementia-prevalence-calculator/

- Health and Social Care information Centre Dementia Resources
  www.hscic.gov.uk/dementia

- NICE Dementia Commissioning Guidance
  www.nice.org.uk/guidance/cmg48

- Dementia Commissioning Pack
  dementiapartnerships.com/resource/dementia-commissioning-pack/
Appendix C

Acknowledgements and contact details

We are grateful to colleagues within the Mental Health, Dementia and Neurological Conditions Strategic Clinical Networks for helping to identify units and to all the people who reviewed and commented on this document.

We would like to thank all the clinical and non-clinical staff who have given us their time to produce this document. In particular, thanks go to the following:

**Gnosall Surgery**
Brookhouse Road
Stafford, ST20 0GP
Phone: 01785 822220
Contact: dawn.gayle@gpfirst.com

**Northumberland, Tyne and Wear NHS Foundation Trust**
Gateshead, Sunderland & South Tyneside Memory Protection Service
Monkwearmouth Hospital
Newcastle Road
Sunderland
Tyne and Wear, SR5 1NB
Phone: 0191 565 6256
Contact: carron.yeouart@ntw.nhs.uk

**Rotherham, Doncaster and South Humber NHS Foundation Trust**
Memory Service
Woodfield House
Tickhill Road Site
Weston Road
Balby
Doncaster, DN4 8QN
Phone: 01302 796000
Contact: david.wragg@rdash.nhs.uk
The Task and Finish Group is:

Principal Author:
Jeri Hawkins  
Mental Health & Dementia Delivery Support Manager  
NHS Improving Quality  
Jeri.hawkins@nhsiq.nhs.uk  

Nalyni Shanmugathasan  
NHS England  

Anne Wilkinson  
NHS Improving Quality  

Steve Bradbury (Chair)  
NHS England  

Special thanks to Jeri Hawkins for carrying out the site visits, interviews, collating and drafting the report and also to Michelle Place, NHS England, who was unable to see this project through to completion due to a change of job.
Appendix D

Gnosall Patient Stories

Eric’s Story
As told by his eldercare facilitator

Background

Eric Thompson, a 52 year old married gentleman went to see his General Practitioner (GP) on 17 June 2014 along with his wife Paula regarding concerns about his memory.

Eric had noticed he was struggling to remember even the simplest things and finding it difficult to take care of himself, Paula had noticed these changes too and also had concerns and they wanted to talk to their GP about this.

Eric had suffered two major health problems in recent months. The problems began October 2013 when Eric was admitted to hospital for a mechanical aortic valve replacement. Then in April 2014 Eric was admitted to hospital with confusion and diagnosed with Encephalitis.

Care Facilitator actions and interventions

As care facilitator (CF), I received a referral from the GP on 19 June 2014 and made initial contact with Paula, successfully arranging to visit Eric accompanied by Paula on 26 June 2014.

Upon my arrival Eric entered the room. My first impressions were how quiet and withdrawn Eric appeared. Eric reported short term memory difficulties for example - forgetting/mixing names up, misplacing items around the home and being unable to operate his computer which is something he has never experienced any difficulties with before. The difficulties were noticed after Eric’s first hospital admission, prior to that period there were no real difficulties. Shortly before the second admission Paula shared that Eric slept for 16 hours, woke up and went "berserk" - Paula explained that normally Eric is the "brick" of the family.

As the holistic structured assessment progressed Paula became tearful and informed me that she had discovered a Stanley knife in Eric’s pocket that morning which Paula removed. I asked Eric about his intentions regarding the knife, Eric stated that it had been his intention to use it but after sleeping on it Eric realized it was a “stupid thing to do”. I had a long chat with both of them, explaining that I felt Eric not only needed help from our memory service but also urgent intervention from his GP regarding his very low mood. Having gained Eric and Paula's consent to share the assessment findings I returned to the surgery and reported my concerns to the on call GP who agreed to see Eric swiftly. I made an emergency appointment with the GP for later that day and informed Eric and Paula. After consulting his GP later that day, Eric was commenced on anti-depressant treatment.
Subsequently I continued to make arrangements for Eric to be seen by the GP First memory service. Eric, accompanied by Paula was seen in the primary care based memory clinic by consultant psychiatrist Dr Renjhen on the 8 of July 2014, less than two weeks after I had met them. Eric will be reviewed in the clinic again in 4 months for a repeat of the Addenbrooke’s Cognitive Examination (ACE). In his letter to the GP Dr Renjhen made several recommendations, one being a referral to the adult services to support the management of Eric’s depressive disorder.

Outcomes

On the 12 August 2014, I visited Eric and Paula at home to follow up how they were. I was pleased to see a real difference in Eric since the last time I saw him. Eric’s mood had improved and continues to do so slowly on a daily basis. Eric is attempting more daily tasks and becoming more independent. Eric has decided he does not wish to be seen by the adult services at the present time because he feels he is now “heading in the right direction”.

It is my belief that if urgent action had not have taken place the outcome to this case may possibly have turned out very differently. Eric and Paula are both very grateful for the support they have received so far. The best part of all for me was seeing Eric smile today for the very first time, simply priceless.
Mrs Brown’s Story
As told by her eldercare facilitator

Care facilitator (CF) actions and interventions

As CF I received a referral from the GP as per usual referral process to memory service. I contacted Mrs Brown and made arrangements to visit and complete a holistic structured assessment. When entering the property of Mrs Brown it became immediately clear that help was needed.

Mrs Brown lived in her home with her son Peter, who also has social care needs. The only help they were both receiving was from a 60 year old friend, who tries to provide support within the home.

It was clear to me that Mrs Brown was in the late stages of some sort of memory problem, she was lacking capacity to understand my conversations with her and her son, and she kept pointing to the window confused. Peter explained that she was hard work and that he wasn't getting any sleep at night time due to his mum being up all night every night. Mrs Brown was already being prescribed sleeping tablets at the highest dose but these didn't seem to be helping. Peter also explained that his mum was a danger to herself at times as she had already burned three electric kettles by putting them on the stove. She had also wandered into the next town but was luckily found safe by the police.

After completing the holistic structured assessment; minus the memory test due to lack of understanding, I explained to Peter that I would need to speak to the GP as soon as possible in regards to help as it was much needed! Peter agreed for an urgent referral to social services to have them assess his mum and her care needs. After liaising closely with the GP, a week later Mrs Brown was admitted into a care home with her son's permission.

Outcomes

As CF involved I feel that if this lady had not been referred to me when she was then who knows what situation she may have found herself in at any point. Her son is now able to concentrate on his own well-being knowing his mum is getting the professional care she very much needed.