**Governing Body Public Meeting**

<table>
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<tr>
<th>Agenda Item No:</th>
<th>Additional Paper</th>
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<td>Date of Meeting:</td>
<td>31st July 2014</td>
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**Paper Title:** Business case: Active Case Management for Patients >75 years

<table>
<thead>
<tr>
<th>Decision</th>
<th>Discussion</th>
<th>Information</th>
<th>Follow up from last meeting</th>
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**Report author:**
- James Gleed AD Primary Care Projects
- Dr Edward Bosonnet, Dr Robin Christie & Dr Deborah Kearns
- Rachel Joyce Medical Advisor ENHCCG

**Report signed off by:**
- John Webster Director of Commissioning ENHCCG
- Alan Pond Director of Finance ENHCCG

**Purpose of the paper:**
The purposes of this paper is to provide a business case for investment of the £5 per patient for the over 75s patient fund in proactive holistic health checks in primary care.

The paper sets out the associated internal/external drivers, needs, benefits and costs.

The latest iteration of this paper reflects the comments received when it first went to the Governing Body on 26th June 2014

**Conflicts of Interest involved:**
Some of the authors are primary care clinicians (GPs) working in East & North Hertfordshire. However the allocation of £5 per patient to general practices to provide enhanced care to patients over 75 years is a government initiative and is not a local commissioning decision.

The way in which general practice uses the money to enhance care is a local decision.

**Recommendations to the Board / Committee**
- To consider, discuss and approve the business case
- To consider and agree the proposed pricing structure.
Business case for Utilisation of the £5 per patient over 75 Fund

Meeting Date 31st July 2014

1 National and Local Drivers

1.1 The NHS planning guidance ‘Everyone Counts’ set out an expectation that every CCG should identify £5 per patient from its allocation 2014/15 and use this to support practice plans for improving services for older people.

1.2 The CCG is now at month 4 and requires a plan for how this money will be utilised. A number of discussions regarding this funding stream have been held, which have generated a range of proposals for its best use. These proposals have all been relatively aspirational, contingent upon new integrated models of working and resource; these may therefore form the basis of new medium-term projects.

2 Scope of Service

2.1 The proposed short-term and immediately available solution to enhance the care for patients over 75 years of age is to increase primary care capacity. The funding will be released to provide additional sessional capacity within practices. The additional sessions will create the capacity in primary care for staff to carry out proactive holistic health checks for the over 75s and develop personal health plans for these patients.

The purpose of the Health Check is to augment preventative care for this cohort of patients through ensuring that patients are on the correct care pathways and also identifying gaps in the current pathways. The health check will comprise of:

- Height & weight = BMI; weight loss enquiry (last 3 – 6 months)
- Blood pressure – sitting and standing
- HbA1c, Creatinine, U & Es and cholesterol in accordance with NHS Health Check (Diabetes Filter) *
- Smoking – advice & signposting
- Alcohol – advice & signposting
- Fracture risk: Frax score
- Falls risk: basic Cryer screening tool (Islington model) plus Gait Speed Test
- Malnutrition screen: MUST score *
- CVA prevention: pulse *
- Hearing: whisper test (if +ve refer to audiology)
- Sight – signpost to eye test
- Cognitive screening: general enquiry if +ve bring back with a carer to do GPCOG
- Frailty assessment: BARTHEL questions and if difficulties identified ascertain whether receiving assistance *
- Identify whether has a carer or next of kin
- Social isolation screening question: ‘are you lonely’?
2.2 The national guidance on the use of the money is explicit - this is additional funding to provide enhanced services for the over 75 patient population. ENHCCG’s objectives would be improving health outcomes and reducing unplanned and unnecessary hospital attendance.

The funding is not to support the implementation of the unplanned admission national DES. The proposed new service set out in this paper is an enhancement beyond the scope of the DES.

The 2% of patients identified as being at highest risk of admission through the national DES would also benefit from this additional service and therefore will be eligible for inclusion.

The proposal being put forward complies with the national guidance.

2.3 Practices could choose to make a proposal to collaborate in order to deliver this service.

2.4 It is believed that this model would also facilitate winter bid schemes. By having a stable locum baseline across practices throughout the year it would be possible to flex up this resource during winter months to meet the additional capacity requirements of winter schemes.

2.5 The Health Check should be GP led, but may have practice nurse and HCA input. The most appropriate model of delivery in terms of the healthcare staff involved may vary according to location i.e. whether it is practice based or community assessment of patients. Each practice must ensure that all staff involved in delivering the health checks have received the appropriate training and have been assessed as competent. Any part of the health check requiring clinical interpretation and/or clinical classification must be undertaken by a GP or Registered Nurse and not a HCA. These include but may not be limited to all those activities marked with an asterisk* in the list above.

3 Intended Benefits

3.1 The anticipated benefits are:

- Early identification and proactive management of conditions that affect older adults
- Formation of individual personal health plans to enable patients to self-care and understand when and how to seek appropriate care in the event that their illness deteriorates
- Targeted utilisation of wider resource, for example falls service and Home First.
- Identification of gaps in service provision for older adults
- Potential for planning & delivery of additional services in the future
4 Service Costs

4.1 Allocation of funding

The guidance states that around £5 per head of population should be made available to practices to improve care for patients over 75 years of age. For the average registered population this equates to approximately £50 per patient over 75 years of age. In East & North Hertfordshire this equates to approximately £63 per over 75 patient.

In East and North Hertfordshire CCG there is variation in the age profile at locality and practice level. Whilst there is no national guidance on the extent to which this investment should be proportionate to age profile, clearly the only logical option would be to allocate the funding according to the number of over 75s.

There is a decision to be made regarding whether to allocate the equivalent of £5 per head worth £63 per patient over 75 or allocate the nationally estimated £50 per head. These are our most vulnerable patients and the proposal is that we should therefore allocate the full £5 per patient.

We are now in M4 and consequently there is a reduced amount of time available to complete all of the health checks required within this financial year (2014-15). It is felt appropriate therefore to structure the period of operation to address this part-year effect. It is also recognised that practices will require some immediate resource to be able to deliver this service during the first month that the scheme is in operation.

It is proposed that:

- £20 per patient over 75 be provided as a pump primer to enable practices to position themselves to immediately start delivering the service

- In addition £50 per health check will be awarded for every health check that is completed.

The scheme will operate over a 12 month period, starting in August or September 2014 (depending on when the scheme receives final approval). Every patient that is over 75 during the 12 month period that the scheme is in operation, may be screened a maximum of once only. Practices will therefore have the potential to earn the full 2014-15 allocation over a full 12 months by delivering the service beyond the 2014-15 fiscal year (into the first half of 2015-16).
4.2 Case example:

Practice with list size = 16,077 patients

Practice over 75s list size = 1,550 (excluding nursing home residents)

£20 per over 75 patient pump prime = £31,000

£50 per health check on every over 75 patient = £77,500

Total remuneration if health check for every >75 patient = £108,500

If we achieve 100% practice up-take and eligible patient coverage the scheme will require an investment of £70 per over 75 patient. This would be against the CCG allocation of £63 per patient. The scheme assumes eligible population coverage of 86% or less.

Should a practice fail to evidence a level of engagement sufficient to ensure that virtually all patients over 75 were offered a health check during the 12month period that the scheme was operating the initial £20 per >75 pump prime payment will be recovered.

It is proposed that Care Home patients be excluded from the resource allocation framework on the basis that enhanced care for this cohort of patients is already delivered and funded through the Care Homes Service.

The investment of the >75 fund 2015-16 allocation will need to be considered as part of next year’s commissioning intentions. No decision has been made at this point that the fund or any part of it will be invested in health checks for over 75s, although the expectation is that it will be directed towards creating additional capacity in general practice.

5 Activity and Outcomes: Monitoring & Payment Mechanism

5.1 The expectation is that at the outset practices will submit their forecast activity setting out the expected number of health checks per month.

Practices will invoice the CCG for the number of health checks undertaken.

In accordance with good governance practices the CCG will audit the service during the year and for this, practices will be required to provide evidence of:

- The procurement of additional clinical capacity
- The number of patient reviews undertaken during the audit period including the number of personal health plans completed for patients over 75 years of age
5.2 Where plans are not achieved practices will be required to submit an exceptions report and action plan that is agreed with their locality leads.

5.3 Outcomes will be measured through existing monitoring and reporting arrangements:

- Reduction in unplanned admissions
- Reduction in unnecessary A+E attendance

It should be noted that whilst impact on mortality & morbidity is uncertain there is evidence to suggest that older adults whom have undergone a health check feel better able to self-cope and manage.

An important outcome will be the identification of gaps in service provision and incorporation in future years’ commissioning intentions and strategic planning.

5.4 However it is recognised that due to the wide range of concurrent initiatives, which are all expected to have an impact on the above it will likely not be possible to establish a certain causal relationship between these new additional health checks and any changes observed in the data.

6 Risks and Mitigating Actions

<table>
<thead>
<tr>
<th>Risk</th>
<th>Mitigation</th>
</tr>
</thead>
</table>
| Member practices may be unhappy with decision re allocation of money. Practices may have planned delivery of services based on receipt of this money in full | Discussed in detail at ‘Clinicians Meeting’  
Options thoroughly explored and debated and decision made by Governing Body that has cross-locality clinical leadership  
Locality leads engage their practices e.g. through locality meetings |
| Inability to evidence and articulate benefits derived from the investment made | Clear outcomes, monitoring arrangements and expectations clarified as part of the business case                                               |
| Uncertain evidence base for preventative healthcare in the over 75s improving outcomes | Literature search has been undertaken & examples of good practice identified  
Proposal reviewed by Falls Group and changes made in line with advice received  
Monitor local outcomes and review service with appropriate degree of methodological rigour before committing 2015-16 resource to scheme |
<table>
<thead>
<tr>
<th>Insufficient GP locum workforce to create capacity in practices LOW</th>
<th>Ensure appropriate use of non-medical staff Use of fixed-term appointments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient premises space to accommodate the additional activity LOW</td>
<td>Some activity will be undertaken in the patient’s home Creative use of existing premises Co-commissioning with Local Area Team and development of premises plans over coming months</td>
</tr>
</tbody>
</table>

### 7 Terms / Acronyms Used in the Report – this section is mandatory as papers are made available to the general public

<table>
<thead>
<tr>
<th>Initials</th>
<th>In full</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frax score</td>
<td>‘Fracture Risk Assessment Tool</td>
</tr>
<tr>
<td>MUST score</td>
<td>Malnutrition Universal Screening Tool</td>
</tr>
<tr>
<td>Cryer score</td>
<td>Falls risk assessment tool</td>
</tr>
<tr>
<td>CVA</td>
<td>Cerebro-Vascular Accident (Stroke)</td>
</tr>
</tbody>
</table>

### 8 Conclusion

**8.1** The authors believe that, at this point in the year, the enhancement to general practice services described in this paper is the most appropriate way to invest the additional money that is required to be invested in the care of the over 75s.

### 9 Recommendations

**9.1** The Governing Body is asked to:

- Approve the proposed investment of the £5 per patient in primary care to deliver a new holistic health check of the scope defined in this paper, to patients over 75 years of age
- Approve the proposed scheme payment structure
10 Appendices: Health Check Guidance and Resources

A. FRAX SCORE (online tool)

http://www.shef.ac.uk/FRAX/tool.aspx?country=1

Calculation Tool

Please answer the questions below to calculate the ten year probability of fracture with BMD.

Country: UK
Name/ID: 

About the risk factors

Questionnaire:
1. Age (between 40 and 90 years) or Date of Birth
   Age: 
   Date of Birth: 
   Y: 
   M: 
   D: 
2. Sex
   ● Male
   ● Female
3. Weight (kg) 
   
4. Height (cm) 
   
5. Previous Fracture
   ● No
   ● Yes
6. Parent Fractured Hip
   ● No
   ● Yes
7. Current Smoking
   ● No
Risk factors

For the clinical risk factors a yes or no response is asked for. If the field is left blank, then a "no" response is assumed. See also notes on risk factors.

The risk factors used are the following:

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>The model accepts ages between 40 and 90 years. If ages below or above are entered, the programme will compute probabilities at 40 and 90 year, respectively.</td>
</tr>
<tr>
<td>Sex</td>
<td>Male or female. Enter as appropriate.</td>
</tr>
<tr>
<td>Weight</td>
<td>This should be entered in kg.</td>
</tr>
<tr>
<td>Height</td>
<td>This should be entered in cm.</td>
</tr>
<tr>
<td>Previous fracture</td>
<td>A previous fracture denotes more accurately a previous fracture in adult life occurring spontaneously, or a fracture arising from trauma which, in a healthy individual, would not have resulted in a fracture. Enter yes or no (see also notes on risk factors).</td>
</tr>
<tr>
<td><strong>Parent fractured hip</strong></td>
<td>This enquires for a history of hip fracture in the patient’s mother or father. Enter yes or no.</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Current smoking</strong></td>
<td>Enter yes or no depending on whether the patient currently smokes tobacco (see also notes on risk factors).</td>
</tr>
<tr>
<td><strong>Glucocorticoids</strong></td>
<td>Enter yes if the patient is currently exposed to oral glucocorticoids or has been exposed to oral glucocorticoids for more than 3 months at a dose of prednisolone of 5mg daily or more (or equivalent doses of other glucocorticoids) (see also notes on risk factors).</td>
</tr>
<tr>
<td><strong>Rheumatoid arthritis</strong></td>
<td>Enter yes where the patient has a confirmed diagnosis of rheumatoid arthritis. Otherwise enter no (see also notes on risk factors).</td>
</tr>
<tr>
<td><strong>Secondary osteoporosis</strong></td>
<td>Enter yes if the patient has a disorder strongly associated with osteoporosis. These include type I (insulin dependent) diabetes, osteogenesis imperfecta in adults, untreated long-standing hyperthyroidism, hypogonadism or premature menopause (&lt;45 years), chronic malnutrition, or malabsorption and chronic liver disease</td>
</tr>
<tr>
<td><strong>Alcohol 3 or more units/day</strong></td>
<td>Enter yes if the patient takes 3 or more units of alcohol daily. A unit of alcohol varies slightly in different countries from 8-10g of alcohol. This is equivalent to a standard glass of beer (285ml), a single measure of spirits (30ml), a medium-sized glass of wine (120ml), or 1 measure of an aperitif (60ml) (see also notes on risk factors).</td>
</tr>
<tr>
<td><strong>Bone mineral density (BMD)</strong></td>
<td>(BMD) Please select the make of DXA scanning equipment used and then enter the actual femoral neck BMD (in g/cm²). Alternatively, enter the T-score based on the NHANES III female reference data. In patients without a BMD test, the field should be left blank (see also notes on risk factors) (provided by Oregon Osteoporosis Center).</td>
</tr>
</tbody>
</table>

**Notes on risk factors**

Previous fracture
A special situation pertains to a prior history of vertebral fracture. A fracture detected as a radiographic observation alone (a morphometric vertebral fracture) counts as a previous fracture. A prior clinical vertebral fracture or a hip fracture is an especially strong risk factor. The probability of fracture computed may therefore be underestimated. Fracture probability is also underestimated with multiple fractures.
Smoking, alcohol, glucocorticoids
These risk factors appear to have a dose-dependent effect, i.e. the higher the exposure, the greater the risk. This is not taken into account and the computations assume average exposure. Clinical judgment should be used for low or high exposures.

Rheumatoid arthritis (RA)
RA is a risk factor for fracture. However, osteoarthritis is, if anything, protective. For this reason reliance should not be placed on a patient's report of 'arthritis' unless there is clinical or laboratory evidence to support the diagnosis.

Bone mineral density (BMD)
The site and reference technology is DXA at the femoral neck. T-scores are based on the NHANES reference values for women aged 20-29 years. The same absolute values are used in men.

**Assessment threshold - Major fracture**

10 year probability of major osteoporotic fracture (%)

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td></td>
<td></td>
<td>0</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
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<td>45</td>
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<td>5</td>
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<td>50</td>
<td>55</td>
<td>60</td>
<td>65</td>
<td>70</td>
<td>75</td>
</tr>
</tbody>
</table>

- **Treat**
- **Measure BMD**
- **Lifestyle advice and reassure**
- **Prednisolone daily dose (or equivalent)**
  - ≥7.5mg daily
  - 2.5-7.5mg daily

**Interpretation**

Following the assessment of fracture risk using FRAX® in the absence of BMD, the patient may be classified to be at low, intermediate or high risk.

- Low risk – reassure, give lifestyle advice, and reassess in 5 years or less depending on the clinical context.
- Intermediate risk - measure BMD and recalculate the fracture risk to determine whether an individual's risk lies above or below the intervention threshold.
- High risk - can be considered for treatment without the need for BMD, although BMD measurement may sometimes be appropriate, particularly in younger postmenopausal women.

**NB - These thresholds are for guidance only and the final decision to assess BMD or to initiate therapeutic intervention lies with the individual clinician.**
Management

- For a more detailed description of investigations, supportive measures and treatments, please refer to the Executive Summary.
- No trials have been designed and powered to detect differences in the magnitude of fracture reduction between different treatments. Thus the choice of agent is determined by the spectrum of anti-fracture effects across skeletal sites, side effects and cost.
- Treatments have been less extensively evaluated in men with osteoporosis than in women, though there is no evidence that skeletal metabolism in men differs fundamentally from that of women.
  - Alendronate, risedronate, zoledronate and teriparatide are approved for the treatment of osteoporosis in men.
  - Secondary causes of osteoporosis are commonly found amongst men, so this population requires thorough investigation.
  - Consideration should be given to referring men with osteoporosis to specialist centres, particularly younger men or those with severe disease.
- The low cost of generic alendronate, which has a broad spectrum of anti-fracture efficacy, makes this the first line treatment in the majority of cases.
- In women who are intolerant of alendronate or in whom it is contraindicated, other bisphosphonates, denosumab, strontium ranelate or raloxifene may provide appropriate and cost-effective treatment options.
- The high cost of parathyroid hormone peptides restricts their use to those at very high risk, particularly for vertebral fractures.

B. BASIC ISLINGTON CRYER SCORE & GAIT SPEED TEST
Gait speed test

Average gait speed of longer than 5 seconds to walk 4 metres is an indication of frailty. The test can be performed with any patient able to walk 4 metres using the guidelines below.

1. Accompany the patient to the designated area, which should be well-lit, unobstructed, and contain clearly indicated markings at 0 and 4 metres.
2. Position the patient with his/her feet behind and just touching the 0-metre start line.
3. Instruct the patient to “Walk at your comfortable pace” until a few steps past the 4-metre mark (the patient should not start to slow down before the 4-metre mark).
4. Begin each trial on the word “Go”.
5. Start the timer with the first footfall after the 0-metre line.
6. Stop the timer with the first footfall after the 4-metre line.
7. Repeat three times, allowing sufficient time for recuperation between trials.

C. MUST SCORE
D. WHISPERED VOICE TEST

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1239718/?page=1
• The examiner stands at arm's length (0.6 m) behind (to prevent lip-reading) the seated patient and whispers a combination of three numbers and letters (for example, 4-K-2), and then asks the patient to repeat the sequence.
• The examiner should quietly exhale before whispering to ensure as quiet a voice as possible.
• If the patient responds incorrectly, the test is repeated using a different number/letter combination. The patient is considered to have passed the screening test if they repeat at least three out of a possible six numbers or letters correctly (i.e. 50% correct).
• Each ear is tested individually, starting with the ear with better hearing. During testing the non-test ear is masked by gently occluding the auditory canal with a finger and rubbing the tragus in a circular motion.
• The other ear is assessed similarly with a different combination of numbers and letters.
• One source of variability in the test is the loudness of the whisper. One study has shown that experienced practitioners are on average 8-10 dB louder than those without experience and they have shown higher sensitivity and specificity when administering the test.

E. COGNITIVE SCREENING: GENERAL ENQUIRY
1. Cognitive assessment in primary care settings

**Initial assessment**

General enquiry
"Has the person been more forgetful in the last 12 months to the extent that it has affected their daily life?"
For example, difficulty using the phone, managing shopping lists, using money, managing their medication, driving, etc.
It is helpful to involve family or a close friend in this consultation.

Optional: D Mini-cog

**Detection of cognitive impairment**

- **C** General practitioner assessment of cognition (GPCOG) * (Requires a carer (family or close friend) to be present) and/or
- **A** Abbreviated mental test score (AMTS)

**Referral and monitoring**

- **Mild**: Refer according to local protocols, Monitor with AMTS/GPCOG
- **Moderate**: Refer according to local protocols, Monitor with AMTS/GPCOG
- **Severe**: Refer according to local protocols, Cognitive assessment as clinically indicated

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**F. BARTHÉL INDEX**

http://physical-therapy.advanceweb.com/Article/The-Original-Barthel-Index-of-ADLs.aspx
<table>
<thead>
<tr>
<th>Activity</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeding</td>
<td></td>
</tr>
<tr>
<td>0 = unable</td>
<td>0 5 10</td>
</tr>
<tr>
<td>5 = needs help cutting, spreading butter, etc., or requires modified diet</td>
<td></td>
</tr>
<tr>
<td>10 = independent</td>
<td></td>
</tr>
<tr>
<td>Bathing</td>
<td></td>
</tr>
<tr>
<td>0 = dependent</td>
<td>0 5</td>
</tr>
<tr>
<td>5 = independent (or in shower)</td>
<td></td>
</tr>
<tr>
<td>Grooming</td>
<td></td>
</tr>
<tr>
<td>0 = needs to help with personal care</td>
<td>0 5</td>
</tr>
<tr>
<td>5 = independent face/hair/teeth/shaving (implements provided)</td>
<td></td>
</tr>
<tr>
<td>Dressing</td>
<td></td>
</tr>
<tr>
<td>0 = dependent</td>
<td>0 5 10</td>
</tr>
<tr>
<td>5 = needs help but can do about half unaided</td>
<td></td>
</tr>
<tr>
<td>10 = independent (including buttons, zips, laces, etc.)</td>
<td></td>
</tr>
<tr>
<td>Bowels</td>
<td></td>
</tr>
<tr>
<td>0 = incontinent (or needs to be given enemas)</td>
<td>0 5 10</td>
</tr>
<tr>
<td>5 = occasional accident</td>
<td></td>
</tr>
<tr>
<td>10 = continent</td>
<td></td>
</tr>
<tr>
<td>Bladder</td>
<td></td>
</tr>
<tr>
<td>0 = incontinent, or catheterized and unable to manage alone</td>
<td>0 5 10</td>
</tr>
<tr>
<td>5 = occasional accident</td>
<td></td>
</tr>
<tr>
<td>10 = continent</td>
<td></td>
</tr>
<tr>
<td>Toilet Use</td>
<td></td>
</tr>
<tr>
<td>0 = dependent</td>
<td>0 5 10</td>
</tr>
<tr>
<td>5 = needs some help, but can do something alone</td>
<td></td>
</tr>
<tr>
<td>10 = independent (on and off, dressing, wiping)</td>
<td></td>
</tr>
<tr>
<td>Transfers (bed to chair and back)</td>
<td>0 5 10 15</td>
</tr>
<tr>
<td>0 = unable, no sitting balance</td>
<td></td>
</tr>
<tr>
<td>5 = major help (one or two people, physical), can sit</td>
<td></td>
</tr>
<tr>
<td>10 = minor help (verbal or physical)</td>
<td></td>
</tr>
<tr>
<td>15 = independent</td>
<td></td>
</tr>
<tr>
<td>Mobility (on level surfaces)</td>
<td>0 5 10 15</td>
</tr>
<tr>
<td>0 = immobile or &lt; 50 yards</td>
<td></td>
</tr>
<tr>
<td>5 = wheelchair independent, including corners, &gt; 50 yards</td>
<td></td>
</tr>
<tr>
<td>10 = walks with help of one person (verbal or physical) &gt; 50 yards</td>
<td></td>
</tr>
<tr>
<td>15 = independent (but may use any aid; for example, stick) &gt; 50 yards</td>
<td></td>
</tr>
<tr>
<td>Stairs</td>
<td></td>
</tr>
<tr>
<td>0 = unable</td>
<td>0 5 10</td>
</tr>
<tr>
<td>5 = needs help (verbal, physical, carrying aid)</td>
<td></td>
</tr>
<tr>
<td>10 = independent</td>
<td></td>
</tr>
<tr>
<td>TOTAL (0 - 100)</td>
<td></td>
</tr>
</tbody>
</table>
The Barthel includes 10 personal activities: feeding, personal toileting, bathing, dressing and undressing, getting on and off a toilet, controlling bladder, controlling bowel, moving from wheelchair to bed and returning, walking on level surface (or propelling a wheelchair if unable to walk) and ascending and descending stairs.

An overall score is formed by adding scores on each rating.

Several authors have proposed guidelines for interpreting Barthel scores. Shah et al. suggested that scores of 0-20 indicate "total" dependency, 21-60 indicate "severe" dependency, 61-90 indicate "moderate" dependency, and 91-99 indicates "slight" dependency. Most studies apply the 60/61 cutting point, with the stipulation that the Barthel Index should not be used alone for predicting outcomes.
Perform blood test for HbA1c, creatinine, U and Es and cholesterol if:

**BMI** is in the obese range (30 or over, or 27.5 or over in individuals from the Indian, Pakistani, Bangladeshi, Other Asian and Chinese ethnicity categories)

Or

**Blood pressure** is at or above 140/90mmHg, or where the SBP or DBP exceeds 140mmHG or 90mmHg respectively

It is important to consider the situation of the individual person, as some people who do not fall into the categories above will still be at significant risk. This includes:

- people with first-degree relatives with type 2 diabetes or heart disease
- people with tissue damage known to be associated with diabetes, such as retinopathy, kidney disease or neuropathy
- women with past gestational diabetes
- those with conditions or illnesses known to be associated with diabetes (e.g. polycystic ovarian syndrome or severe mental health disorders)
- those on current medication known to be associated with diabetes (e.g. oral corticosteroids).