Improving the care and management of older adults with diabetes living in the care home setting

Background
The number of older people aged over 65 living with type 2 diabetes is rising and set to increase sharply to five million people by 2025. When older people with type 2 diabetes become frail and no longer able to manage at home, a care home is often the most appropriate place for them to live. One in four people in care homes have diabetes. Diabetes UK suggest somebody living in a care home with diabetes is admitted Into hospital every 25 minutes, with this set to rise sharply to one person every 10 minutes. It is not a mandatory requirement for care homes to have diabetes training.

Objectives
- Increase the awareness of care home staff to recognise and treat hypoglycaemic episodes.
- Increase the ability of care homes to monitor blood glucose in line with NICE and Trend standards.
- Reduce the number of hospital admissions for care home residents due to hypoglycaemic episodes.
- Increase the awareness of care home staff to recognise signs and symptoms of micro-vascular and macro-vascular disease related to diabetes.
- Improve the carers’ understanding of the dietary needs of care home residents.
- Ensure every care home has a hypo-box available for residents.
- Ensure residents with diabetes in care homes have an individual management plan.

Method
Four initial training sessions were held and PDSA (plan, do, study, act) cycles were used after each session to develop and adapt the training to meet the needs of carers. This included adding practical glucometer training and insulin administration training.

Model of training
- A robust, evidence-based module for improving basic diabetes education and care in nursing and residential homes (TREND, 2015) – including high risk areas of hypoglycaemia, hyperglycaemia and foot care.
- Competencies and self-assessment evaluation for both modules which allows identification of training needs using the ‘how to’ model (Diabetes UK, 2016).
- Training that would meet the Care Quality Commission (CQC 2015) guidance for inspecting the quality of care for residents with diabetes mellitus living in care homes.
- A replicable model which could be applied in any other CCGs.
- An advanced module for those care staff whose learning improved through the first module and were willing to take on the responsibility of administering insulin as an unregistered practitioner.

Results
Seventy carers from 23 care homes have attended the training.

Pre and post competency assessment were undertaken on key areas:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Pre training</th>
<th>Post training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood glucose monitoring</td>
<td>42%</td>
<td>100%</td>
</tr>
<tr>
<td>Able to recognise hypoglycaemia</td>
<td>16%</td>
<td>100%</td>
</tr>
<tr>
<td>Know the treatment for hypoglycaemia</td>
<td>29%</td>
<td>92%</td>
</tr>
<tr>
<td>Understand the risk of diabetic foot disease</td>
<td>30%</td>
<td>96%</td>
</tr>
<tr>
<td>Implement sick day rules</td>
<td>4%</td>
<td>100%</td>
</tr>
<tr>
<td>Number of homes with hypo boxes available</td>
<td>25%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Conclusion
Community nursing support is being provided to the trained care home staff to make sure the learning is embedded into practice. Funding has been agreed to continue the training for a further two years. Training will be delivered by KCHFT staff and offered to all care homes in the trust’s area.

Longer-term cost analysis of the average hospital admission for hypoglycaemia events against the cost of the training will be completed if there is a reduction in hospital admissions of patients from the care homes who have completed the training.