Final report

November 2017

Innovating for Improvement

Health Call Undernutrition Lunch Clubs

County Durham and Darlington NHS Foundation Trust

The Health Foundation

Contents

About the project

Project title:

Health Call Undernutrition – using digitally enabled 3rd sector lunch clubs to reduce Undernutrition and Social Isolation in hard to reach patients.

Lead organisation:

County Durham and Darlington NHS Foundation Trust

Partner organisation(s):

Age UK Darlington (now Age UK North Yorkshire and Darlington), Inhealthcare

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Part 1: Abstract

County Durham and Darlington NHS Foundation Trust worked in partnership with Age UK Darlington (AUKD) and Inhealthcare to develop digitally connected lunch clubs aimed specifically for undernourished patients referred for dietetic advice. AUKD volunteers provided information, using the Health Call Undernutrition app, regarding a patient's nutritional health. This was available to the clinician who would respond directly to address their changing needs and adjust treatment plans accordingly.

Undernutrition and social isolation are both causes and consequences of each other, independently having a negative impact on quality of life, health and social outcomes.

Historically there has been no lunch clubs a health with focus and this is the first time digital health has been deployed in this environment.

Results:

- 27 patients attended
- Reduced social isolation
- Over 50% gained weight
- No significant weight loss recorded
- Improved appropriate nutritional supplement prescribing
- Peer to peer learning and support
- Acceptable environment for health care delivery
- Improved access to dietetics

Key challenges

- Poor awareness of lunch clubs despite varied communications
- Low referral numbers
- Length of time gaining correct information governance in the NHS is far more time consuming and cumbersome than the third sector
- Gaining momentum and engagement in small projects that leads to a sustained change in practice

Lessons learnt

- Cultural and organisational differences between NHS and third sector can be overcome with honest and open communication
- A stable project management team is essential to maintain the momentum of the project

Part 2: Progress and outcomes

Undernutrition and social isolation are both causes and consequences of each other and independently have a negative impact on quality of life and health and social outcomes.

Historically a significant amount of effort and cost (travel and time) has been consumed by the care economy monitoring the weight and nutritional status of house bound patients.

Within Darlington digital technology, Health Call Undernutrition (HCUN http://www.nhshealthcall.co.uk/digital-health-products/undernutrition /) has replaced the need for some face to face appointment and is used to enable patients to provide information regarding their nutritional health remotely, allowing dietitians to make appropriate changes to treatment in a more timely manner. There were some patients that were unable to engage with HCUN for a variety of reasons such as poor eyesight, unable to independently weigh themselves safely or cognitive impairment.

Age UK Darlington (AUKD) provides a variety of services to tackle social isolation, including lunch clubs. There had been no joined up working between Age UK Darlington and the CDDFT previously..

CDDFT, AUKD and Inhealthcare worked in partnership to develop digitally connected lunch clubs that were aimed specifically for people clinically identified as undernourished and referred for dietetic advice. AUKD volunteers monitored the weight of attendees and using the HCUN app this information would be made available to the clinician who would be able to respond directly to the patient either via a phone consultation or through attending the lunch clubs.

Originally it was planned to hold lunch clubs fortnightly in three venues. Due to the lack of numbers at each of the venues, the confusion with the clubs not being weekly and the added complexity of food transportation it was decided after 2 months to rationalise the clubs to a weekly central venue. It became apparent that we had been ambitious with our target number of 250 in year one and the outcomes that we would be looking to evaluate and therefore made adjustments to these. A total of 27 patients attended the lunch clubs.

A mixed method approach was used to collect data. HCUN was used to collect information regarding:

- weight,
- oral nutritional supplement (ONS) compliance
- appetite
- weight changes
- risk of undernutrition using the ‘Malnutrition Universal Screening Tool’ (‘MUST’)
- attendance

This data was analysed by Wessex AHSN. Health Watch Darlington interviewed all patients that attended for the first three months to provide qualitative information regarding the impact on patients. A patient satisfaction questionnaire was completed at the end of the project. Table 1 shows the intended evaluation matrix:

Inputs	Outputs	Outcomes		
	Activities	0-6 Months	6-12 months	Impact
Budget ▪ £73K **Staff** ▪ HCUN Team ▪ 1 x 0.5 WTE Band 7 ▪ 1x 0.2 WTE Band 5 dietitian (in kind) ▪ 1 x 0.2 WTE Band 3 Dietetic Assistant (in kind) **Inhealthcare Software Licence** ▪ Monitoring for up to 250 patients for up to a year **Equipment** ▪ 3 x smart devises **Premises** ▪ Lunch club venues across three sites in Darlington **Stakeholders** ▪ Nutrition & Dietetic Service ▪ Community Nurses ▪ GP Practices ▪ Medicine management ▪ Darlington CCG ▪ Darlington Local Authority ▪ Age UK Darlington ▪ Healthwatch Darlington ▪ InHealthcare ▪ Patients	▪ Establish project board & group ▪ Engage stakeholders ▪ Communicate to Stakeholders ▪ Develop and communicate referral processes ▪ Develop care pathways ▪ Develop evaluation matrix ▪ Develop reporting mechanisms ▪ Identify patient already prescribed ONS, ▪ Create caseloads on Inhealthcare Portal ▪ Create caseloads on Systm 1 ▪ Develop Systm 1 templates ▪ Obtain Systm 1 access for GP surgeries ▪ Develop business plan	▪ 25% of appropriate patients referred to HCUN to be attending lunch clubs as part of their treatment and monitoring ▪ Increased awareness of the importance of undernutrition for people not under the care of the dietitian ▪ Start to identify the unmet need of individuals who are undernourished through self – referring into the lunch clubs ▪ Start to identify the impact of social isolation on the client group	▪ 50% of appropriate patients referred to HCUN to be attending lunch clubs as part of their treatment and monitoring plan ▪ Patients who have attended a lunch club are attending other services	▪ More appropriate & cost effective prescribing of ONS ▪ Improved monitoring of patients identified as at risk of undernutrition ▪ Patients feeling better supported ▪ Reduced time between dietetic reviews ▪ Individuals feeling less socially isolated ▪ Increased uptake of other Age UKD activities ▪ Improved patient safety due to quicker access to dietetics ▪ Improved self-management ▪ Business case developed to support sustained funding

Table 1: Evaluation Matrix

Social Isolation

Health Watch Darlington interviewed all the participants in the first three months. See appendix 1 for the full report.

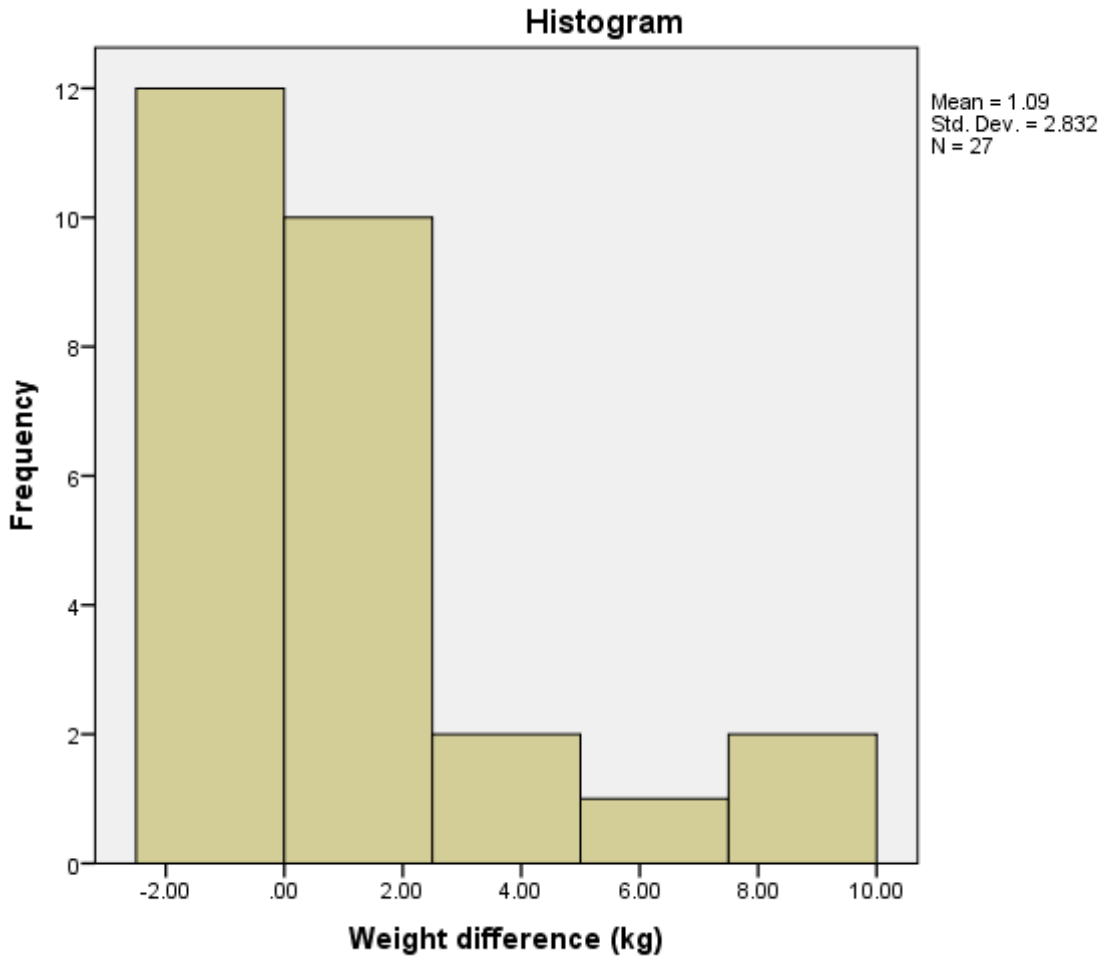
75% of participants reported that they felt isolated in their everyday life and that this impacted on their nutritional intake whether that was from cooking a meal for themselves and then not being bothered to eat it to not having someone that could help with opening jars or lifting heavy sauce pans and therefore limiting their intake.

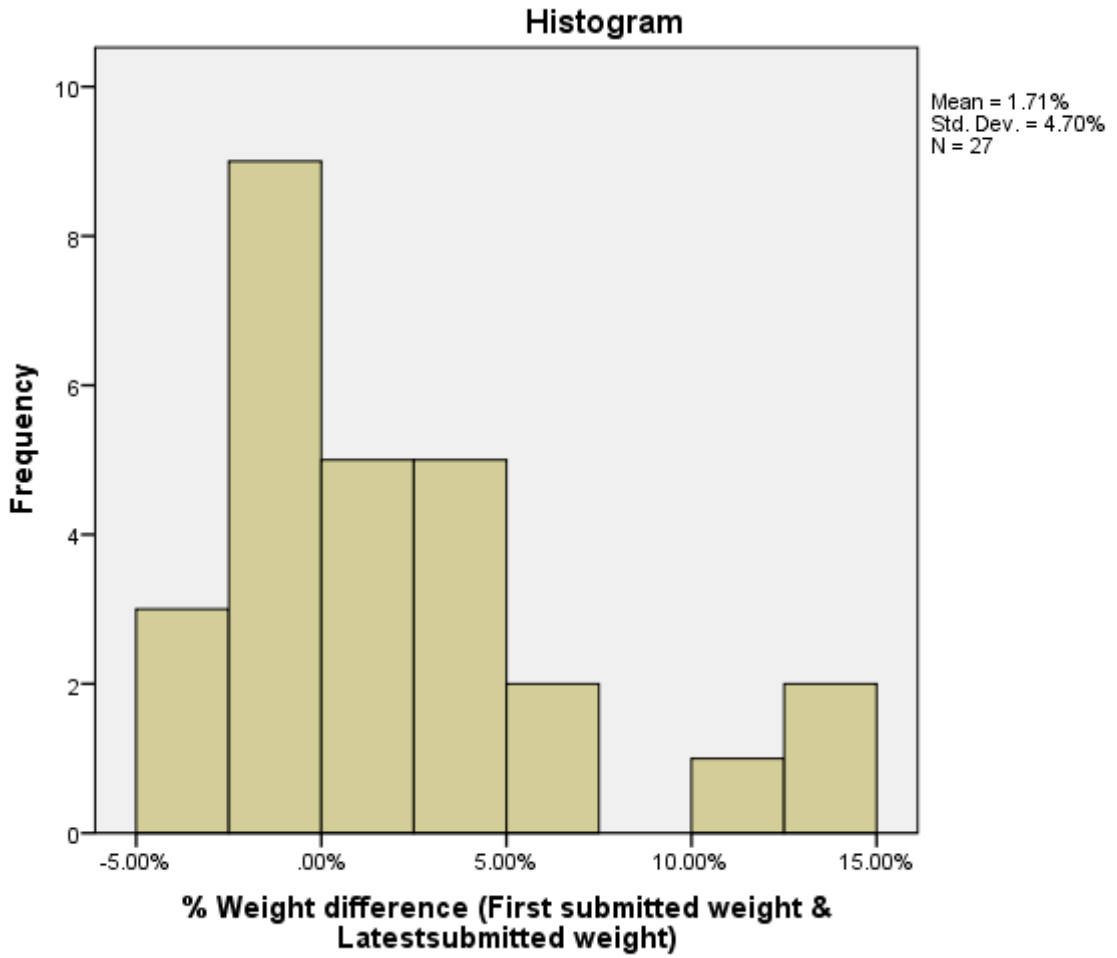
100% felt that they had benefitted from attending the lunch clubs “its nice to do something different for a change”, “stops me sitting in and watching telly”.

Changes in weight and risk of undernutrition.

Significant weight change is described as greater than 5% (increase or decrease), the ultimate aim with dietary advice would be to gain weight however, with this client group quite often the more realistic aim would be to maintain weight. Risk of undernutrition is calculated using the 'Malnutrition Universal Screening Tool' ('MUST').

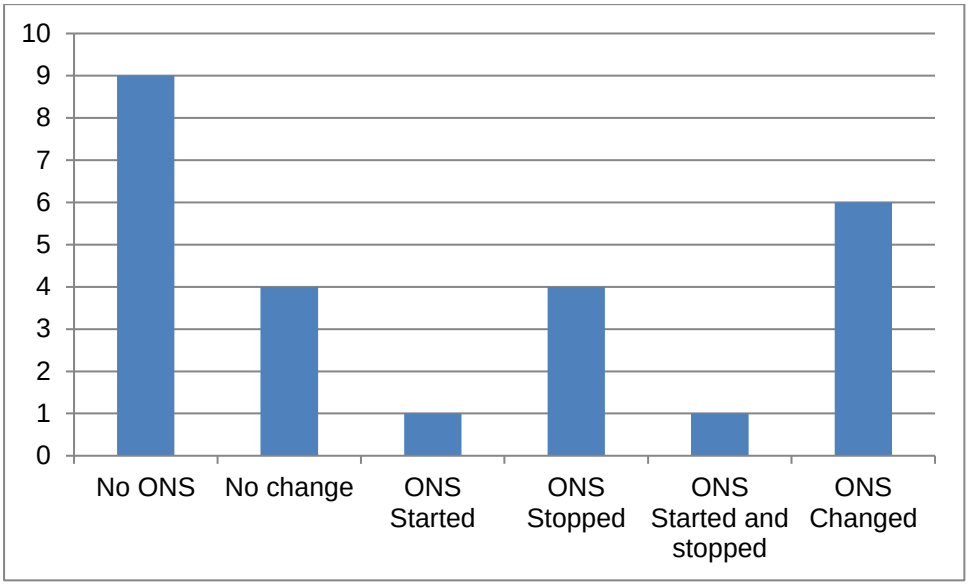
It was found that 52% of patients gained weight (histogram 1) and of those that lost weight there was less than 5% weight loss (histogram 2) which would not change their risk of undernutrition using 'MUST'. The average weight change was =1.09kg.





ONS Prescribing

13 patients were prescribed ONS when they first attended the lunch club, 10 patients had an ONS prescription at the end of the project. The chart below shows the impact regular monitoring had on ONS prescribing. As a result of the changes £252 per month was saved on ONS prescribing (30%).



Access to dietetics

Traditional dietetic care follow up is delivered in line with service protocols and pathways rather than in line with patient's needs. Using HCUN in the lunch club setting allows clinicians to respond to the needs of the patient when it is needed rather than when their next appointment dictates which could be 2-3 months away. Therefore, identifying and being able to address concerns sooner. For example Mrs A, is of low weight and as a result of a UTI lost further weight. This was identified the following week and her treatment was changed and weight gain was recorded. If she had waited for another dietetic follow up appointment more significant weight loss could have been experienced and subsequent secondary complications.

Clinical alerts are received when information entered is outside of predetermined parameters e.g. if there is a weight change of over 2kg in an 8 week period or if the ONS are not tolerated. There were a high number of clinical alerts received. This was due to low numbers patients who had met their goal were not discharged, as they were low risk of undernutrition a clinical alert was received. On average 2 (23%) of patients required dietetic input each week, (0-5).

Part 3: Cost impact

We have estimated that it costs £29,000/year to run one lunch club a week, based on the following:

Age UKD: £15k (includes venue hire, food, transport and staff costs)

Health Call Licence: £40/patient

Dietetics: £14k

This equates to £**560** per lunch club.

Each lunch club would have a maximum of 20 people attending at any one time and patients would attend for a maximum of 12 weeks, equates to £**376** per patient.

Without a full health economic evaluation it is difficult to determine the true cost impact. The cost of undernutrition is estimated to be £19bn in England alone and social isolation has been shown to have severe negative impacts on health and well-being.

The standard prescription for ONS costs £117 - £235 per patient per quarter, there was a 30% reduction in ONS costs as a result of patients attending lunch clubs and 9 patients were prevented from being prescribed an ONS.

Other costs savings will be realised as a result of:

- Reduced dietetic travel for home visits
- Reduced dietetic activity - under usual care every patient would on average have four 30 minute face:face appointments per episode of care. Using HCUN on average 2 patients per week needed dietetic input, this would usually take the form of a 5-10 minute phone call
- Reduced requirement for other community health care assistants carrying out home visits to monitor weight (£50 per patient)
- Anticipated further ONS savings with bigger cohorts of patients
- Reduced access of other health care services

We know that from other projects regular monitoring and timely dietetic intervention has resulted in a 69% reduction in ONS for those that were registered on HCUN and a 42% reduction when compared to usual care.

The total cost for this project was £73,300. This includes the one off set up costs of the project manager, evaluation teams and travel.

Part 4: Learning from your project

The project has been a partnership between CDDFT, AUKD and Inhealthcare. CDDFT providing clinical expertise and Health Call Undernutrition, AUKD providing the expertise in establishing lunch clubs and Inhealthcare providing the platform that the Health Call app sits on the ability to feed the information back to electronic patient records (EPR).

The lunch clubs provided an innovative way of bridging the gap between health and social care. Bringing patients to a central venue for third sector volunteers to monitor their nutritional health. This moves away from the traditional method of health care delivery and utilises the valuable assets that the third sector and technology can provide to create efficiencies, improve quality of care and patient safety. Clinicians are alerted if there are any changes to patients nutritional health (positive or negative) and can make appropriate adjustments to their treatment plans. This means that the volunteers are able to weigh and record the answer to set questions without having to interpret information or offer advice.

Key achievements:

- Weekly lunch clubs established with a regular attendance of patients
- Reduced nursing visits
- Health Call Undernutrition app successfully used in a lunch club setting
- Peer to peer learning and support
- Demonstrations of food fortification to increase patients knowledge
- Roles and responsibilities for volunteers established
- Patients appreciated being weighed regularly
- Barclay's Digital Eagles providing support and education on using smart devices and reducing spam calling
- Other organised activities/ awareness sessions
- Friendships formed within the club
- Respite for carers

One of the key enablers to the successful establishment of the lunch clubs was a stable project group and project manager. The project group initially met on a weekly basis to maintain the momentum of the project and ensure that any challenges could be identified and resolved quickly. The project group had an open and honest relationship and were all dedicated to ensuring the success of the clubs. There were some issues at the start of the project which was generally as a result of

communication difficulties, for instances assumptions that acronyms were understood and that we were all using the same language. It became apparent early on that there were some differences in the interpretation of some phrases and words. This was easily resolved by ensuring that everyone understood what was being said. Once the lunch clubs were established the project group met on a less frequent basis.

Other enablers included the technology of Health Call Undernutrition as an app. Tablets were brought for AUKD to enable volunteers to be able to enter the information. A small amount of training was required for the volunteers to feel confident and competent in using the app. The tablets had a wider function of being able to be used by the Digital Eagles to increase the digital know how of patients. Although there was a distinct split of patients that were already engaged with technology and those who didn't want to know.

The AUKD volunteers and paid staff provided support that without the lunch clubs wouldn't have been possible, including:

- Sourcing the appropriate venue
- Transporting patients to and from the clubs
- Weighing patients
- Preparing the food

The staff and volunteers from AUKD also provided a very valuable social support and established a fantastic rapport with all of the patients and developed friendships. It has been rewarding for all the team members to see the friendships and support that have grown as a result of the lunch clubs which has extended beyond the clubs. For some of the patients this was the only time they left their house, the mini bus ride was as much a part of the event as the lunch. One lady reported that it had been the first time that she had been out for over 6 months and loved seeing the flowers.

There were challenges throughout the project:

- Length of time to get sign off for information governance and data sharing
- Delivery of the food to the venues
- Poor awareness and understanding amongst health and social care staff of the role of the lunch clubs
- Low numbers
- Poor awareness of the lunch clubs of members of the public to self-refer to
- Poor awareness of undernutrition amongst health care professionals

- No referrals received from local dietetic team
- Inappropriate venues initially selected

Despite numerous attempts to raise the profile of the lunch clubs with members of the public and health care professionals there remained a poor awareness of them. We had two television campaigns, numerous press releases, communicated with all GP practices, had a poster campaign and presented at local conferences and meetings. Practice nurses reported that they had the posters above their desks in their consultation rooms but when they saw patients they didn't connect the dots. This is not unusual within the health service as there are huge numbers of projects that are dependent on the buy in from other health professionals. Like this project they will be the priority of the project team but not of the wider health and social care teams who have increasingly busy caseloads, why would they remember one small project. But then how do you move forward from pilots to sustainability without this? Especially with short term funded projects when traction and awareness might just be increasing when they come to an end.

The Health Watch report highlighted the fact that members of the public equally don't associate that being a low weight or having experienced weight loss can have an impact on their quality of life. Patients reported feeling weak and not being able to stand to prepare foods or open jars as well as being concerned about their weight but didn't associate the two together. This may be why there was a limited number of people self-referring, we need to get away from the theory that we lose weight as part of the aging process.

Although all patients reported that one of the reasons for going was to be weighed and that they appreciated the dietetic advice that was on offer they didn't seem to see the lunch clubs as 'health'. The advantage is that we had achieved a relaxed, informal environment that people felt at ease in and they were happy to have their outcomes measured and to discuss dietary matters in that arena and it didn't seem to impact on their commitment to coming to the lunch clubs and all were aware that it was part of their dietetic treatment.

Part 5: Sustainability and spread

Although the lunch clubs have not been able to continue in the current format with the undernutrition monitoring they are going to continue in some form. AUKD will continue to run the lunch clubs on a weekly basis and transport patients but will charge £3 or £5 depending on if transport was required or not. There have been 2 clubs since the funding was stopped and 16 people attended each one. These will be promoted through the local dietetic service and wider health community to help to maintain the number of people attending. Since they have been running this way there have been 2 new people attending. The venue has changed to the AUKD building, which is still central but has the advantage of other AUKD events being held in the same building which will further promote the lunch clubs, all new attendees will have the option to have their weight monitored if they wanted. There will be no direct referral to the dietitian through this but AUKD volunteers will recommend that a GP appointment is made to initiate a dietetic referral. GP referral is the pathway for accessing dietetics under normal care however, having the ability for patients to have their weight monitored could have the impact of increasing awareness of the issues of undernutrition and the understanding that you don't lose weight because you are old.

Although access to Health Call will no longer be available, the tablets that were purchased as part of this project have remained with AUKD and will be used to provide education about technology, such as using web based calling to contact family members or online banking.

One option to be able to continue to sustain the lunch clubs would be to ask patients to pay for the meals and transport, some patients did report that they felt uneasy that they weren't paying for them. This however, does not tackle the change in delivery of dietetic service. Due to the current fragmented funding streams this has not been something we have been able to tackle within the scope of this project.

This project has shown that lunch clubs are an acceptable setting for patients to receive health care interventions and for either third sector volunteers to provide some of the monitoring with a link back to clinicians or it could be that clinicians attend a lunch club or something similar as a 'one stop'. I was able to interact with 16 patients at a time over a 1.5 hour session and have meaningful discussions and provide real demonstrations of the advice that I was providing. This wouldn't have been possible in the outpatient or home visit setting. The lunch clubs are a replicable model and could be implemented in other areas, are there routine monitoring that community nurses or other health care professionals undertake at great time and cost in individual patient houses that could be undertaken in this setting? This would require investing in the platform as well as the time and effort that is needed in transforming service delivery.

There has been some dissemination of the outcomes of the lunch clubs through local television news, regional free publications that are distributed to every household in

Darlington and regional conferences.

The final outcomes will be published in a national dietetic journal and on the Health Call website. Darlington has been awarded a Health New Town status and is taking the lead with Digital Enablement Stream. Health Call has been established as a company with regional NHS acute trusts being shareholders, providing them with access to the platform, enabling the transformation of services using digital health. This provides us with another vehicle of promoting lunch clubs as an option for other organisations to deploy as they will have access to already developed digital services

Appendix 1: Resources and appendices

Patient interviews - lunch club.docx

HCUN Independent Review.pdf