The Guy's and St Thomas' NHS Foundation Trust Neighbourhood Nursing Team Test and Learn project of an adapted Buurtzorg model: an early view

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Summary

This is an early view evaluation of a Test and Learn pilot of an adapted Buurtzorg model (section 2) undertaken during the first seven months in Guy's and St. Thomas' NHS Foundation Trust (GSTT) adult community services. The model offers two interacting innovations:

1. A renewed focus on patient centred care,
2. Self-managing team of nursing staff.

This pilot as planned (Section 3) has had iterations as both the Neighbourhood Nurse (NN) team and also the parent organisation have tried ideas and learnt throughout the period (November 2016-July 2017). The early view evaluation therefore offers insights and also raises questions to be considered by the NN teams and GSTT going forward.

The evidence presented here demonstrates that patients and carers were able to report a positive change in the nursing practice they experienced compared to previous experience of district nursing. Individual patients could describe how this change had resulted in direct improved clinical outcomes (Section 4).

Observation of the nursing practice confirmed that the NN team nursing practice was very different from the District Nurse (DN) team practices but noted the NN team had a small patient caseload. Inefficiencies in district nursing recording of care and duplication between home visiting nursing services were observed and raised questions as to whether there was learning from the NN team's ways of working that could be adopted in other DN teams (Section 5).

Positive outcomes were reported by General Practitioners (GPs) and other health professionals, although there was some surprise expressed at some team members' need for training in what were considered common community nursing situations. GPs and other health professionals pointed out the inefficiencies without shared patient records, a situation experienced across community nursing services (Section 6).

Examination of anonymised patient records demonstrated small numbers of patients in comparison to the staffing, although this was a period when many new staff were recruited and being inducted. The analysis showed some very different patterns of nursing staff contact such as high levels of telephone consultations compared to the DN service. The NN team also provided short term personal care and meal preparation activities for some patients in contrast to the DN service. However, without accurate descriptions of patient case mix and acuity this is hard to interpret. The absence of outcomes or process outcomes further adds to the difficulties in gauging effectiveness and costs (Section 7 and 10). These are elements to investigate and consider over a longer period of time and with more patients than in the Test and Learn pilot (section 10).

The nursing staff described their experience in very positive terms and viewed the coach as an important role. The experience was also described as challenging. Challenges came both from learning to work as a self-managing team but also from the extent the wider GSTT organisation recognised the concept of a self-managing team. The lack of information technology systems to support mobile working (a current project in GSTT) and nursing practice was particularly irksome compared to that on offer within the Dutch Buurtzorg service.

The NN team staff offered advice for nurses who were setting up such teams and also organisations that were considering implementing such teams (Section 8). The NN team staff and the managers in

GSTT were unanimous that 'back office' support should be in place before a nursing team commenced (Section 9).

There was strong commitment from the leaders and managers in adult community services to testing and championing this model. At the same time there was curiosity and questioning as to the value and impact of an adapted Buurtzorg model in an inner London setting. Some interviewees reflected on the readiness of the wider management cadre and administrative and support departments to embrace the concept of self-managing teams (Section 9).

One point of learning has been trying to understand the optimum mix of experience and skills needed for an effective self-managing nursing team. The first group of nurses had limited experience of community nursing, which changed in subsequent recruitment. This raised the question as to whether some of the 'learning' in the initial phase was of learning to work in the community rather than specifically learning to work in the Buurtzorg model (Section 3, 8). Some nurses chose not to join the team following interview or joined and subsequently left. This suggested that this is not necessarily a model that all are comfortable with (Sections 3 & 8). One aspect raised for consideration is how the NN team staff experienced 'flat' structures with salaries fixed on their previous employment and as yet no clarity on career and financial progression. Many of the working practices the NN team adopted addressed the issues that the DN nursing staff raised as aspects they disliked about their jobs (Section 8).

This early view evaluation was not able to address questions of cost for a number of reasons not least the evolving team, practice and administrative support. We have offered insights into how this could be undertaken in the future and some of the challenges within that (Section 10).

The model therefore holds potential for patients, carers and staff. With the 'settling' in period over and the establishment of two NN teams there is opportunity to evaluate this model over a longer period of time.

1. Introduction

Guy's and St Thomas' NHS Foundation Trust (GSTT) provides adult community services to the populations of Lambeth and Southwark. This includes community nursing (such as district nursing, specialist nursing, community matrons, end of life care) and community rehabilitation and re-enablement services (e.g. community therapy, falls, neuro-rehabilitation) and admission avoidance schemes such as Enhanced Rapid Response, Supported Discharge, and @home (a hospital at home service).

In response to both increasing demand for district nursing services and also significant and enduring problems in recruitment and retention of nurses in the district nursing service , Guy's and St Thomas' Adult Community services decided to test a new model of care for community nursing based on the Dutch Buurtzorg model[1].

The decision was made, with the support of the wider organisation and health and social care commissioners, to undertake a 'Test and Learn' pilot. By 'Test and Learn', GSTT adult community services described a phase of iterative trialling of this model which was to start relatively small and would be adapted, based on learning, throughout the Test and Learn pilot. The Test and Learn pilot was designed to run for approximately nine months with modifications and refinements expected throughout the period. The first three Neighbourhood Nurses (NNs) were in post and taking patient referrals in November 2016.

The evaluation of this Test and Learn pilot was designed to offer formative insights as well as evaluative methods for a second period of a scaling up to a second team. The formative evaluation addressed questions about the organisational experience of implementation, about potential impact on nursing practice changes, patient and carer satisfaction and outcomes as well as questions as to the types and availability of patient level data required to consider cost effectiveness. It also addressed questions of the nurses' experience. It drew on the Donabedian[2] framework for judging quality in health care i.e. criteria of acceptability, equity, effectiveness, appropriateness, and patient safety which are those that underpin all health and social care commissioning and quality assessments. This report provides an early view evaluation of this Test and Learn pilot. It draws on:

- Interviews with patients and families, neighbourhood nurses, general practitioners, community nurses, managers,
- Observations of members of the Neighbourhood Nurses and district nursing team providing care and during their day,
- Analysis of anonymised patient records,
- Analysis of reports and documents internal to GSTT.

This report commences with a brief summary of the Buurtzorg model followed by sections on: the lessons learnt so far on: implementation, changes in nursing practice, community clinical expertise, working in health and social care networks, the experience for the staff, outcomes and costs and a blueprint for the next steps in evaluation.

2. The Buurtzorg Model

Buurtzorg ("care in the neighbourhood") is a not for profit organisation in the Netherlands which was established initially as a self-managing district nursing team of four in 2007[1,3,4]. By 2015 Buurtzorg employed 9500 nurses in 800 independent teams providing care to 60,000 patients a year with 45 back office staff, 15 coaches and no managers[3,4]. The Buurtzorg model was developed to address the

dissatisfaction of community nurses to policy changes which created greater fragmentation and poorer quality in care. The model includes:

- Self-managing, independent teams of nurses. There is a maximum of 12 nurses (70% are registered nurses/40% bachelor degree nurses) in a team. ").
- The teams work in a geographical neighbourhood of 5-10,000 population.
- Each team cares for between 40 -50 patients using a nursing practice model that emphasises: responding to the person's expressed health care needs, promoting independence, self-management, health promotion , prevention and draws on other 'neighbourhood' resources. The care provided includes personal hygiene and meal preparation but not housekeeping.
- This model is underpinned by a delivery continuity principle which ensures as far as possible an individual nurse (or two) provide the care.
- The use of a software system for clinical records (using the OMAHA nursing classification system[5]) which is used on mobile devices. This allows back office data capture of outcomes and administrative data which is required to fulfil quality governance and financial billing requirements[3,4].

Advantages have been presented by Jos de Blok, the Buurtzorg Chief Executive as:

- High levels of patient satisfaction,
- High levels of satisfaction from GPs and local authority partners,
- High levels of staff satisfaction – including national prizes for best employer , lower sickness rates,
- Less admissions to hospital and nursing homes,
- Profit 4% - to be re-invested in staff development , IT etc.,
- Lower costs for the service because:
  - The model emphasises more prevention and a shorter period of care
  - Lower overheads (overheads 8 %)[3,4].

In the Netherlands home-care organizations have contracts with government-funded insurance companies to provide 10 different home-care services. The number of authorized hours is based on individual patient assessments. Buurtzorg has negotiated a flat per-hour payment method for its services[6]. A review of the Dutch evidence and applicability to the United States reported "Buurtzorg has earned high patient and employee ratings and appears to provide high-quality home care at lower cost than other organizations" (Gray et al. 2015 p1[6]). This review also noted that total health costs per patient were about average for Dutch home care when the cost for nursing homes, physician and hospital care were included.

3. Implementing an adapted Buurtzorg model Neighbourhood Nursing team

3.1. The antecedents for change and identifying the innovation

Recruitment and retention of nurses to the district nursing services in inner London is an ongoing problem. High turnover and vacancy rates have a concomitant negative impact on patient care. Having spent some years actively trying to reduce turnover rates and improve retention of nurses as well as manage the rising demand for the district nursing services, the GSTT nurse managers were seeking radical new ideas that might provide sustainable solutions.

Attendance at a presentation of the Buurtzorg model by Jos de Blok in London led the head of community nursing to identify the potential of the Buurtzorg model. Individual nurse managers and then a larger group of managers undertook fact finding visits to the Buurtzorg organisation and teams in 2015 and 2016. After some months of deliberation about implementation options, a decision was made to proceed with a 'Test and Learn' pilot project, which included having a package of support from the Buurtzorg organisation and its partner organisation Public World [7]. The Test and Learn pilot had a steering board with membership from a range of stakeholders including general practitioners, commissioners from Clinical Commissioning Groups and Local Authorities.

3.2. The organisation's principles in setting up the neighbourhood nurse team

In setting up the Test and Learn a number of principles underpinned the decisions. These included:

- That a 'bubble' would be created in which the neighbourhood nursing team would be self-managing and protected from the wider organisation,
- That the team would be an independent, self-managing team with a coach and some support as a "back office",
- That the nurses would be recruited using a values based approach - the values being those within the Buurtzorg model of nursing practice,
- That 'neighbourhood' was important and that the team would cover a geographical area for patient referrals and this area would be of a size such that they could walk to their patient homes within about 20 minutes,
- That the geographical area would be of a size to generate an appropriate number of patient referrals from general practices/general practitioners who were interested and supportive of the 'Test and Learn' pilot,
- That the care provided could include personal hygiene and meal preparation i.e. that usually provided by social care services,
- That this was a 'Test and Learn' pilot which meant reflection for learning and iterative adaptions would occur throughout.

3.3. Establishing the neighbourhood nurse team

Three nurses and their sessional coach were in post by November 2016. The appointment process used a values based approach – the values being linked to the Buurtzorg principles of nursing practice and self-management. The coach was already working within the adult community services with responsibilities for clinical standards in adult clinical services. She also took over a locality management responsibility for district nursing services during this period.

There was a continuous advert for staff for the Neighbourhood Nursing team alongside the advert for staff for the district nursing team. All the neighbourhood nurses were involved in the almost monthly recruitment process and interviews for new members. The values based approach was used in this recruitment also. Significant amounts of neighbourhood nurse time were allocated to recruitment from January to April. The numbers of nurses grew over the time period and included a health care assistant (figure 1).

|	Neighbourhood Nursing Team	Coach and Back office
November	♀ ♀ ♀	*Coach in place*
January	♀ ♀ ♀	*Project manager fulfilling some back office functions*
February	♀ ♀ ♀ ♀	
March	♀ ♀ ♀ ♀ ♀ [♀]	*Part-time back office support in place*
May	♀ ♀ ♀ ♀ ♀ [♀] ♀ ♀ ♀	
June	♀ ♀ ♀ ♀ [♀] Team split into two teams	

[♀] Health care assistant
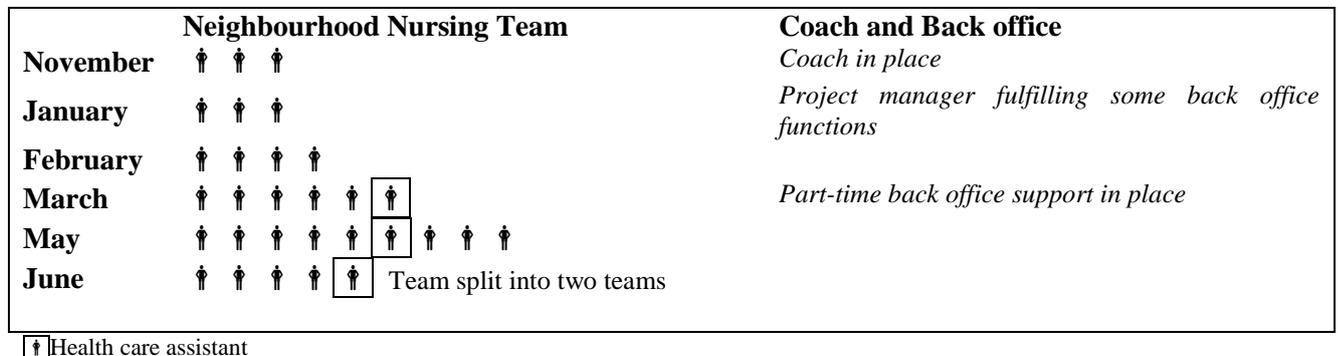
Figure 1 The Neighbourhood Nursing team staffing timeline

Two nurses were offered posts but chose not to accept. One nurse accepted a post and started but left shortly afterwards. Another nurse left her post after some time. One reason reported was concerns about the flat structure and career progression. These events indicate that the self-managing team with a flat, non-hierarchical structure may not be acceptable to all nurses.

Of the first three nurses appointed, all had significant years of nursing experience, one had a primary care nursing degree and one had not worked in a community role before. One held an independent nurse prescribing qualification. Most of those subsequently recruited had experience in community nursing services. By May 2017 enough nurses had been recruited to split and establish a second team in a different neighbourhood (and borough) in mid-June 2017. The plan for the second team had been agreed by the steering group in April 2017.

While the coach had been identified from the beginning, back office administrative support was a later addition to the Test and Learn pilot. The first three neighbourhood nurses described how they spent significant amounts of time in administrative /project management processes e.g. to find and set up an office base, negotiate for equipment and information technology. The neighbourhood nurses described it as a '*huge relief to have back office – now we can get on with nursing*'.

A key learning point referred to by managers and the nurses was that '*back office support needed to be there from day one*' and some suggested even before the nurses were in post. It was evident in the setting up of the second team that having someone providing the '*back office*' or administrative support meant that much was organised in advance of the team starting. For some managers this was also a learning point about the extent of and organisational support required for self-managing nursing teams (see also section 9).

While the NN team was described as independent and self-managing they were not the budget holders for their staffing, clinical equipment or for any patient nursing needs funded by the NHS and provided through community health services e.g. incontinence pads.

3.4. **The neighbourhood nurse team and the Buurtzorg principles**

The first three nurses and the coach spent time with a Buurtzorg team and their coach in the Netherlands. These nurses described how "*it all clicked and made sense*" when they talked with and observed the Dutch Buurtzorg nurses and their coach. Key elements they took from their Dutch induction and referred back to in their meetings (as observed by the evaluation team and raised in discussion), were;

- The 'Buurtzorg onion' model of nursing practice (figure 2) which places the patient at the heart of everything that is done,
- The team is collectively responsible for the outcomes of their work,
- The team creates their own book of rules on their agreements of how the team would operate and deliver its service,
- The team conducts solution orientated meetings,
- Team decisions are based on voting within weekly team meetings,
- Team members have specified responsibilities, such as chair and note taker for the team meeting, which rotate.

All of their methods of self-management drew on the English version text "Self-management: How does it work?" by Astrid Vermeer and Ben Wenting [8].
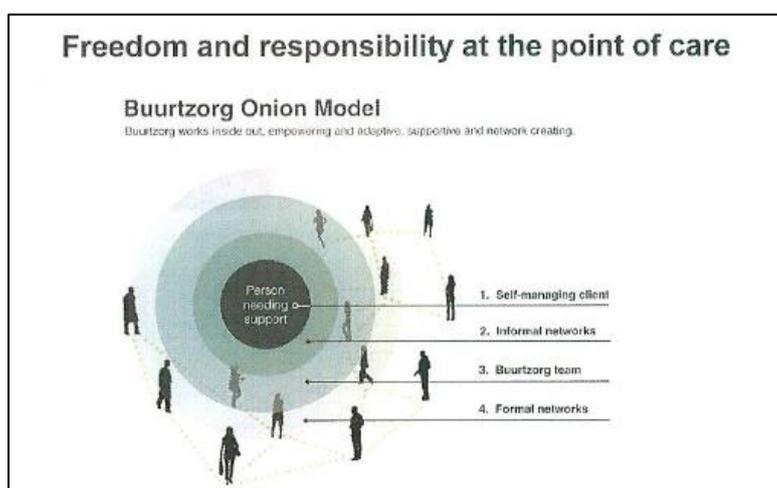
Figure 2 Buurtzorg Onion Model

With the recruitment of staff throughout this period, the neighbourhood nurses were constantly inducting new members from January to June. This induction was not just into the Buurtzorg model of nursing practice but also as required by GSTT adult community services for new staff. The plan was for all within the Neighbourhood Nursing team to have the opportunity to visit a Dutch Buurtzorg team.

> **Questions for future consideration**
> What are the features of induction of new staff into Neighbourhood Nursing Team ways of working both in terms of self-management but also nursing practice?
> Do all new nursing staff need to visit Dutch Buurtzorg teams to understand the principles?

We turn now to report the patients' experience of the Neighbourhood Nursing Team.

4. Perceptions of nursing practice by patients

GSTT have a number of ways of receiving patient feedback on community nursing including a patient experience survey and the Friends and Family test. During the Test and Learn pilot this system was unable to differentiate between responses received from patients of the NN team and the DN teams, a point raised with GSTT for future adjustment.

In this section evidence is presented from interviews with patients and family carers receiving NN team care. The evaluation team interviewed patients and carers of the NN Team as well as received secondary feedback from others involved in primary care. We then refer to similar interviews conducted with district nursing patients by AGEUK Lambeth [11].

4.1. The patients and their overall views

Twelve NN patients and two family carers (ten women and four men) were interviewed face to face or by telephone as they preferred. The frame work for the interviews was based on that used previously by AGEUK Lambeth in interviewing patients of the district nursing service [9].

The interviews lasted between 20 minutes and an hour. The care they had received could be categorised in the three different groups used by the evaluation team of short term care (under 14 days), long term condition care and palliative care (see section 7). Eight patients had previously received district nursing services at some point in their lives.

Most of the patients were able to describe that it had been explained to them that this was a new type of service in which the nursing was being provided in a different way. One patient was aware that the new team was self-managing.

All the patients interviewed were very positive about the care provided by the NN team.

> "*The care the neighbourhood* [nurses] *giving is first class*" Patient 9

> "*I was very pleased with the care I received. They were unhurried and quite informative…. I would thoroughly recommend them to anybody in my situation.*" Patient 4

> "*It should be rolled out across the country, because my experience of it* [neighbourhood nursing] *is absolutely wonderful.*" Patient 8

> "*Marvellous*". Patient 10

> "*I think the neighbourhood nurses are the best solution so far to trying to keep people monitored who are not in hospital that have got conditions and giving them the support they need to keep them out of hospital.*" Carer 10

None of the patients interviewed had had cause for complaint. None of the patients interviewed considered that the service required improvement or made suggestions for improvements.

> "*I don't know whether they can do anymore because whenever they come to do something they finish the job.*" Patient 10

4.2. The approach of the nurses to providing the service

Patients commented on the friendliness of all the nurses, their caring approach, and their willingness to listen and address the needs of the patient.

"They are very good, yes - very caring and very kind - so it's fine." Patient 5

"That's my kingpin [the nurse], *because she's like you* [the interviewer], *she sits down and listens and she doesn't...., you start a sentence, she let me finish like you do".* Patient 3

They will sit down and listen to you and whatever they can do, they do for you, so I'm happy" Patient 8

"Now, the neighbourhood nurses have transformed everything because they came in... And they conducted a thorough review of all her requirements, her pads, and they actually listened to us" Carer 10,

All patients knew how to contact the nurses and reported that appointment times were negotiated, often confirmed in advance by telephone and kept to. Those patients receiving care for long term conditions and palliative care understood they had a '*main*' or '*principal*' nurse but knew all the members of the team either because they provided care when the main nurse wasn't working or had shadowed another nurse as part of their induction. One patient described the nurses as '*being engaged*' with him and contrasted that with other primary care professionals. Some of the patients were able to describe that continuity from individual nurses had a direct impact on the process and outcome of their care.

"The good thing about the neighbourhood team is they build up a load of knowledge about what's working on an individual patient. They were finally able to pinpoint – [a contributory issue in a non-healing wound], staying with the patient as they go through the processes - picking up information from the patient as well - actually results in a more all-encompassing view of what's going on." Patient 5

"These women are here every day, they can look at my condition and they can tell you whether my pain relief is working or not, because they will be able to see whether I've been able to sleep. They'll be able to see it without me saying anything to them. So they said ' we need to control this pain better, because at the moment it's just not working'.... as far as the pain control is, we think we've got that pretty much resolved, at this moment." Patient 9'

One patient offered a reflective caveat from past experience (not her current experience) for the NN team to consider going forward, "*when you have one person dealing with your problem and there's a personality clash, then it can become a real problem, a real issue.*" Patient 4

Most patients commented that the nurses always explained everything about their condition(s), how they could best manage/improve their condition(s) and gain agreement for the nurses input/care. Two patients commented that, with their long experience of their conditions and their work background pre-retirement, they didn't need '*the idiot's guide explanation*' but they understood why the nurses were doing this.

Some patients commented how the nurses had given them confidence to manage their condition, to continue rehabilitation activities post-surgery and for long term conditions.

"They were always very positive about what I was doing for myself then. I feel that was appropriate, because they were confirming what I was doing was right. Therefore, it made me more confident in myself." Patient 4

"When I'm not doing well they tell me exactly what I'm doing wrong. They do this and that and they praise me if you're doing it right and so-on and so-forth. So at least you have confidence, you know. It's two-way traffic." Patient 6

It was evident from the all the interviews of those with long term conditions care or palliative care that the patients and their families considered they had good relationships with the nurses and that the nurses responded to their expressed needs. A carer gave the example of the NN nurse ringing up on a bank holiday as part of a follow up to a visit earlier that week and on hearing that the social care carers had failed to arrive had immediately helped:

"[name] *called about nine o'clock, came in and said 'I'll give you a hand and so rolled up her sleeves and helped me change her'.*" Carer 10, "*Yes, even bathed me and changed me on* [name of bank holiday]*!"* Patient 10

This carer later commented in the interview that: "*I think they're the first people* [NN team] *who have really seriously shown an interest in what my situation is and how I have to adapt to looking after mother. Also taking in to a point of fact that I have got health conditions of my own."* Carer 10

The proactive approach of the nurses to identifying and trying to address potential health problems or problems in their network of health and social care was positively commented on by many of those interviewed.

"*They* [the nurse] *questioned me about what medication I was taking, and they helped me in the first week, because I was having breakthrough pain. She did suggest a different regime to what I was doing, and maybe trying to speak to the doctor to change a painkiller, which I did".* Patient 4

"*They* [the NN nurse] *have come in and they have pushed the whole thing* [the care required to support a patient with a stroke] *into shape and knocked it into shape and got on with doing the things which we'd been waiting six or eight, 12 months for things to happen…. And they'll explain what they've done like 'I've phoned your GP'."* Carer 10

Sometimes the nurse was proactive in suggesting a course of action and encouraging the patient to act (as above) and in other instances the nurse took action on behalf of the patient.

"*The first time she came, she took my blood pressure and it was very high and she went straight down to the doctor's and then from there I got the different pills.*" Patient 1

In the following exemplar the patient describes how positive it felt to have the nurse be proactive on her behalf. The nurse took action, on hearing of a delay to a patient receiving antibiotics, by visiting the GP for the prescription, then the pharmacy to have it dispensed and then taking the medication to the patient's home. The patient said:

"*I walk with* [mobility aid] *so for me to go to the chemist or for me to go to the doctors is a bit of a struggle. So to have somebody who's actually on my side and looking after my interest is a great bonus."* Patient 6

One patient however reported a negative experience of the nurse being proactive. In this situation the nurse wanted to implement a course of action (about a new potentially serious physical symptom) which the patient refused based on recent hospital attendance, medical review, and preferences.

"A lot of old people have a line that they don't go past. In the end, she [the NN nurse] *was arguing with me so much, I said to her: 'Look, you've come to see my* [condition], *not anything else.' ……..* [The nurse insists on the course of action] *I said: 'Hang on! You don't do that.' I said: 'That's going past the line.' She was really worried, I suppose. I said: 'No, no, no. I won't allow you to do that; you're not allowed to do that.' Anyway, I'm all right; there's nothing wrong with me".* The patient then recounted negotiating a compromise with the nurse which addressed the nurse's concern. The patient went on to reflect *"I think I might have been quite an awkward patient at that time. That might be something that the neighbourhood team have difficulty with: awkward patients."*

Many of those receiving long term condition or palliative care commented on the positive working on their behalf between the NN team and the GPs, as well as with specialist services

"Yes, it's teamwork and they work together, my doctor and the nurses them they get along good." Patient 9

"Also, when there's been any deterioration in my condition then, as well, they've been able to not only liaise with the GP's, but also they've got onto people like the specialist at the hospital, and even on to, in fact the doctor specialists as well, and explained situations in a way which a lay person isn't able to do. It's guaranteed that I've been seen a lot faster than I would have ordinarily." Patient 8

Three of the patients and a carer discussed specialist nurses versus a neighbourhood nurse team and held slightly different views.

One patient reported having seen the benefit of having a specialist tissue viability nurse dealing with complicated wounds but also mused *"You also maybe don't have enough patients to warrant having a specialised person who does* [just complicated wounds]. *Because nurses have got pretty broad skills, so if you were going to have nurses who specialise in certain skills, it wouldn't then be the same as having a neighbourhood team, would it? It would be like having a specialised person; you might lose something by doing that".* A second patient described the involvement of a specialist nursing team for some activities as confusing and unnecessary when there was already a close relationship and frequent provision by the NN team who repeatedly demonstrated their competence in the care. While the third patient had mixed experiences, describing the @home team visiting on hospital discharge as the first experience of *"crack team"* who really helped. This patient then described experience of a different specialist nursing service who *"had come out and done a review but my feeling was that it was more to do with which boxes are ticked rather than what is actually required for the patient"* . This was then contrasted to the positive experience of the listening approach and then the advocacy, on the patient's behalf, of the NN nurses.

Two of the patients recognised that different members of the nursing team had different levels of experience and identified situations in which those with more experience had dealt with a situation differently.

4.3. **Comparing and contrasting with experience of the district nursing service**

Eight of the patients had had previous experience with the district nursing service. Sometimes this was four or more years ago but for some this was in the more recent past.

Some patients complimented the district nursing service and individuals who provided care:

"I had them [district nurses] *in the past and they were quite good as well"* Patient 5

"Some of them [district nurses]*, in fact, were very good."* Patient 8

"Some of the district nurses are lovely people like [name] *was part of the old-school district nurses but she retired"* Carer 10

However they were all also able to point to a number of problems with the district nursing service which they did not experience with the NN team. These were:
- A lack of continuity in nurses attending them and its impact on their care,
- Brief visits with a concomitant lack of attention to any problem beyond that the nurse had attended for,
- Lack of follow-up to initial visits or subsequent care,
- Difficulties in contacting the nurses.

We give exemplars for each of these:

Impact of lack of continuity in nurses

"What would happen with the district nurses is you'd get a district nurse who would assess me in a different way; would take a different view. You'd get someone come in - I would say: 'Oh, they've [the last nurse visiting] *stopped doing that* [wound management] *because* [gives reason].' 'Oh, it's all right; this one's* [dressing] *all right,'* [the words of the nurse] *and they'd* [the different nurse] *put it on. So then, the next visit, I was in trouble again* [problems with the wound breaking down again] *even though it had only been on, say, maybe half a day, or whatever.....So I kept improving and regressing,.... So just one person doing it* [wound dressing] *different would put me back where I began; which didn't happen with the neighbourhood team at all."* Patient 6

Brief visits with a concomitant lack of attention to any problem beyond that they had attended for,

"This new system [the NN team]*, which has picked that up* [the potentially serious new physical symptom]*. Whereas in the old system that would never have happened at all, because they* [district nurses] *didn't want to stay in the place more than five minutes if they could help it".* Patient 8

Lack of follow-up

"Yes, originally the District Nursing Service was put on to me some years ago and it proved to be very insatisfactory [sic]..... That was nearly four years ago and there was no follow-up. Every time I needed anything I had to go to the hospital. Now since then, of course we now have the new neighbourhood nursing system. ... The new system is so different, it's like cheese and chalk." Patient 7

"I would say the first 12 months of her care here was very hit and miss with district nurses. She developed a very bad pressure sore and it was really when she developed the bad pressure sore that they were sort of prodded into getting more involved". Carer 10

Difficulties in making contact

"Yes, they [the NN team] *supplied me with the mobile numbers and then they had the office numbers and everything else. It was all set out on a proforma sheet and everything else. It's like a folder I got which is very good because I can call anybody. If* [name of nurse]*'s not available then I can speak to somebody almost immediately which is a vast improvement to the old system because you would ring sometimes to ask for the district nurse and it would be one of those things if you ever got through but you never heard back."* Patient 5

"The neighbourhood nurses are very easy to get hold of. There's no reception or phone system you have to go through to get hold of them. I found with the old district nurse system you'd phone them up and you'd say it's [name], *da di da. Very hit and miss whether you'd be called back or whether anything would ever happen! Then I'd have to make another call a week later and go, sorry did you get the message that I left?"* Carer 10

4.4. Current patients' perceptions of the DN service

GSTT has for the last few years commissioned AGE UK to undertake interviews with 35 DN patients. An outline of the findings of their 2017 report [9] is given in Appendix 2. In summary, the majority of these patients thought the care provided was very good or excellent. The majority did not consider themselves to be able to self-manage. Three patients of 35 interviewed suggested that the DN service required improvement. The majority of suggestions by these and others for improving the service were for:

a) Being given appointment times for visits and contacted when these had to be altered,
b) For the nurses to spend more time with them and have smaller numbers of patients to visit in that shift.

Single patients suggested each of the following improvements: that more information should be given about other services, that the nurses should provide nail cutting and that the nurses needed more training.

The patient feedback in the AGEUK Lambeth report [9] is consistent with the patient feedback from the district nurse patient experience surveys in 2016 [10].

Question for consideration

Are there methods of working by the NN team, which seem to address the issues about continuity in the nurse, arranging appointment times, and contacting nurses, that can be adopted more broadly in the DN service?

4.5. Summary

All patients receiving NN and most receiving DN services expressed a high level of satisfaction with the service. Some of those receiving DN services were dissatisfied and suggested improvements. The NN patients who had previously received DN services were able to pinpoint some key elements that made a difference to their care and its outcome: continuity in nurse provision, time in the appointments to address wider issues, a listening and pro-active approach of the nurses as well easy contact mechanisms and negotiated and kept appointments. The extent to which individual patients desired or were content with the nurses being proactive or their behalf varied probably reflecting individual characteristics and circumstances.

We now report on the observation of the NN team and DN nursing practice from the perspective of an experienced provider, educator and observer of district nursing practice.

5. Observing nursing practice

Observation of nursing practice was undertaken by an experienced district nurse and auditor of district nursing practice. Eight shifts of eight hours were observed with four members of the Neighbourhood (NN) team and four members of the District Nursing (DN) services in late May and early June 2017. A full account was provided for GSTT however a summary only is provided here in the interests of anonymity and in recognition that it was a brief snapshot which might or might not be generalizable. The two team days are first of all described, then the observation of patient care, concluding with some comments on systems.

5.1. The team day

The DN team

The DN team generally went to the base office at the start of a shift to collect any supplies needed for that day and receive a printed list of the patients they were to see that day. On the days observed with the DN team, the nurses generally returned to the base office between 1-2pm. Most did not appear to take a lunch break and continued working at their desks if they ate anything. On returning to the office the nurses followed up on any issues identified during the morning e.g. ordering supplies and prescriptions or contacting GPs or social workers about issues of concern. At about 3pm the nurses came together for a feedback meeting. This was usually led by the caseload holder and notes made on the computer system about any concerns. The meeting usually went on for about 30 minutes and was joined sometimes by the pharmacist, senior nurse and practice development nurse. Nurses only fed back information about patients for whom they had concerns. The rest of the time in the office was spent updating the patient's records on "CareNotes" (the electronic recording system) on computers

The two caseload holders spent time together once a week allocating the patient appointments for the following seven days. The DN service operates a system of 15-minute units (known as Batmans[11]) for apportioning staff time. Each patient is assigned a number of units depending on their needs. A band 5 [12] nurse (a staff nurse) is expected to undertake 20 units each day (equivalent of 5 hours clinical time but this also includes travel). Band 6 [12] nurses, who are caseload holders with a leadership role for the team, are expected to have 16 units (4 hours of clinical time). One nurse, usually the case holder but not exclusively, had the duty phone for any new referrals or queries that come in during that day. In allocating the work, mode of travel was taken into consideration to ensure that distances between patients were reasonable for those who walk to patients rather than drive. The DN team members wear uniforms that differentiate their grade and job role.

The NN team day

In the morning the nurses generally came into the office in the same way as the DN teams, to collect supplies and receive any update of changes happening overnight. Often there was a transfer of the duty phone at this time. The NN nurses seemed to reassemble at around lunchtime. There was a formal solution oriented meeting on a Thursday that started at 11am and there appeared to be a meeting on a Friday for weekend handover. The nurses all ate lunch but as there was no social space this was done at their desks. Handover tended to be informal at lunchtimes or nearer the end of the day when they returned to the office. Many patients were contacted by phone in these periods.

There was no hierarchy in the NN team and it was usually the person with the duty phone that took on any new referral. They would then be the key nurse for the patient although often supported by another nurse in the team. The NN team did not use the time allocation system neither did they wear

uniforms. At the time of the observation the NN team described themselves as having just over half the patient caseload that they had capacity for.

5.2. **The patients observed**

Each patient observed was allocated a domain from A-D that reflected the complexity of the nursing care the nurse gave (A highest complexity and D the lowest complexity) and also a universal score for the acuity of the patient's condition (from 1,low acuity, to 18, highest acuity . These tools have been developed by QUEST [13] with engagement from frontline nurses and leaders in community nursing education and previously used in a number of audits of district nursing services in England. Generally it would be expected that those patients in the higher domains (A and B) would have higher universal scores as they would be more acutely ill or need more complex care.   However the impression gained was that the patients of the DN team were of higher acuity and needing more complex care. They had a small number of patients (2) in the lowest domain of care D (table 1). These patients are generally self-caring and only need support to self-care.

	Patient QUEST care domains			
	Most complex			Least complex
	A	B	C	D
DN team (n= 25)	3	10	10	2
NN team (n=16)	1	7	3	5

Table 1 Summary of patient QUEST care domains by team.

The NN team did not require patients to be completely housebound at this point before admitting them to the caseload but this was a strict criterion for the DN team (appendix 1 , NB the NN team changed their criteria by the end of this evaluation period). However in discussion with the NN it appeared that some patients in domain D were now self-caring following intervention by the team to support and teach them how to self-care (such a patient with type 1 diabetes was observed). Currently it was not apparent that the NN team (or the DN teams for that matter) are able to record these positive outcomes in a meaningful way. The NN nurses were very aware of the need to demonstrate outcomes and used case studies of change and success in their public presentations.

5.3. **Nursing activities observed**

All DN nurses were pleasant and caring towards patients and competently carried out the task for the patient, routinely asked about the patient's bowels, pressure areas and sleep. However there was a great focus on completing the purpose of the visit e.g. completion of a leg ulcer dressing. The DN nurses appeared to be more task focused in their approach although they did have higher numbers of patients to visit in the same time frame as the NN team. This focus meant that the observer considered that sometimes other potentially important factors were not given attention. The observer speculated whether this might be the result of the newness of the staff to working in the community.

It was clear to the observer that the NN team had a different approach to care. All nurses seemed to have a very personal relationship with their clients. They were often hugged and kissed by the client. Many clients gave unsolicited praise for their nurses citing how much they appreciated the continuity of care and the relationship they had with the nurse. Many patients were telephoned before the visit and often a time for the visit was negotiated. For almost every patient, each NN team nurse asked if they could get them anything to eat or drink and were quite happy to do this for the patients on some occasions. During the visit the NN nurses placed much more focus on the total care of the patients

than most of visits observed of the DN nurses. They also spent time offering health promotion and preventative advice. For the patients seen with the NN nurses the communication with the social carers seemed to be fuller and more inclusive than that observed with the DN team for example explaining how best to help the patient to mobilise more. One query was raised from the observations as to whether some of the NN team were referring patients back to GPs at an earlier point or with a less clear rationale than experienced community nurses or those with advanced clinical skills would.

5.4. Recording care

The care notes in each patient's house were requested as part of the observation.

In the DN team observations there was often a lot of paperwork in the notes that made finding the care plan and continuation notes difficult. The focus seemed to be on the presenting problem and there seemed to be little recorded awareness of how the patient's past medical history may have influenced their presenting problem. To the observer there seemed to be a burdensome way of recording of details of care given, including consent, at each visit in the continuation notes and then repeated on the electronic Carenotes system even when this was clearly articulated in the care plan. The Carenotes system cannot be accessed remotely and it was observed as time consuming to complete it (especially since the nurses wrote the same information as in the house). We are aware GSTT has a major project on introducing mobile working. In contrast the NN team only documented in the home if there was a change to the care plan or if medication has been given. Instead they made brief notes on their work phones and emailed this to themselves to cut and paste into the Carenotes record when they were in the office. This appeared a more efficient system of recording care.

5.5. Specialist teams and nurses

Through the observations it was apparent that there were number of specialist teams and nurses that also provided care for patients in their own homes. It was difficult to gain clarity from DN nurses on referral criteria for example to community matrons and the different teams for community care of the dying. The potential for confusion over responsibilities and to patients and carers was evident in one observed visit with a DN team nurse to a patient who was entering the terminal stage of her life. As this patient needed generalist palliative care it was not apparent why at least two other specialist teams were involved in her care as this is usually standard district nursing work. One of the comments that the patient's relative had made during the visit was that the level of care was very good but she found confusing the number of different health care professionals involved in the care and what their respective roles were. The impression was gained in discussion that the NN team would provide all care for people in terminal stages of their life rather than involving another team.

> Questions for consideration
>
> Why was the NN team patient caseload not at capacity and did the referral processes , or catchment area need attention ?
> What is the impact of having staff new to community nursing on nursing practice in both types of teams?
> Could the nursing practices of the NN team be transferred to the DN teams?
> What is the impact of multiple specialist home visiting teams on the skill sets of the DN teams?

5.6. Summary

The nursing practice of members of the DN team and the NN team were observed by an experienced district nurse who has undertaken similar observations of district nursing practice in a number of parts of the country. At the point in time when the observations were done the NN team did not have a full

caseload of patients; in part due to the recruitment and induction of the nurses who would form the second team. The DN team had higher numbers of patients and spent shorter periods of time with them than the NN team. DN team patients appeared to be more acutely ill and complex than those visited of the NN team. The approach of the NN team members was markedly different than that of the DN team members. NN team members appeared to have a more personal relationship with their patients and their carers. They appeared to be addressing the patient and carer expressed needs as well as using all opportunities for health promotion in the widest sense.   The DN team members appeared to be more focused on single tasks. The NN team ensured continuity in the team members(s) visiting and confirmed visiting times. The NN team members had adapted their nursing practice to be as efficient as possible, particularly in the absence of mobile working.

6. Perceptions of nursing practice by others in the patients' health and care network

We interviewed GPs, which included email viewpoints from their colleagues, and other health professionals involved in the care of patients seen by the NN Team. While we approached social care staff we were unable to secure interviews in the time period.

The GPs and some other health professionals gave positive feedback on the NN team and their approach:

"*They're certainly very enthusiastic and caring for the patients*",

"*The feedback we've had from patients is that they'll do anything for them*".

"*They have made such a difference with some of the most difficult to engage people with mental health problems and other long term conditions*".

One GP commented that:

"*A lot of our patients are quite isolated and lacking in support, and it's just the practical things that normally a family or children would sort out, especially in the elderly, are actually really important if you're not very capable yourself, and they're really helping with that.*"

While there was a note of caution added with feedback from one family who had found the approach of the NN team "*almost intrusive*", a GP reflected that patients' and their families had different expectations and preferences in the extent of input from primary care services and this need gauging at an individual level.

The GPs also reported that they had very good feedback from families regarding care at the end of life, " *they've been especially good for the end-of-life patients, you know, palliative care, so in conjunction with the palliative care teams, giving very close attention to those patients, and I think the family have found that good support generally, as well.*"

One health professional expressed some surprise that initially the nurses in the NN team did not have expertise in some common clinical issues nursed by community nurses and had to have training. However this person also noted that the turnover in the district nursing service meant there were often also DN team nurses without this sort of expertise. They also wondered how some of the activities which they understood the nurses were doing were appropriate and sustainable such as taking patients out shopping (something NN team members described with one patient as a health promoting activity in teaching about foods to manage diabetes).

The GPs and some health professionals noted that in comparison to the district nursing service, the NN team "*they do seem to be more proactive, I think, in care.*" It was also noted by health professionals that the NN team were able to spend time to build a relationship with some of those who were most suspicious or disengaged with health services such as with long term mental health problems or learning disabilities. Some health professionals could point to significant quantifiable clinical improvements in their patients as a result of the NN team's work with their patients. These were clinical improvements that had not been achieved by any other previous health care involvement.

The GPs thought part of the explanation for this was that the NN team probably had smaller numbers of patients and therefore more time. They also noted positively that the NN team seemed to be raising patients' issues and offering potential solutions rather than '*dumping*' the problem on the GP; for example reporting a patient's blood glucose was high and asking if a particular course of action would be appropriate. The GPs could see the potential for the NN team to take on more clinical management of patients' long term conditions e.g. diabetes. This was endorsed by other health professionals who suggested that some more specific updating in aspects of long term condition management together with nurse prescribing qualifications would support the NN team in responding more efficiently or quickly to patient need.

Turning to aspects that the GPs considered were weaknesses or needed attention, it should be noted that these were couched in terms of the issues and problems of the wider infrastructure and relationships between different services. The health professionals we spoke to also noted the inefficiency and problems of community nursing Carenotes system which did not interface with primary care patient records. The NN team were commended on their responsiveness and communication methods with other health professionals.

Some GPs suggested that currently the NN team nurses weren't differentiating between issues that needed urgent GP attention and those that were less urgent and this had to be the potential to be unnecessarily disruptive to prioritising GP time. However, the GPs were keen to communicate and considered this was just a learning process, "*I think it's just because they're not always familiar with how our systems - how busy we GPs are as well*". This was also discussed in the wider context of the system where currently GPs and district nurses cannot view the same or part of the same clinical record, which would help resolve some of the communication issues. The GPs pointed to the advantages in the new shared care record with the hospital.

Question for consideration

Does the working relationship between the GPs and NN team change over time, for example as they grow accustomed to each other's preferred ways of working and build trust?
Over time do the NN team members increase their role and responsibilities in the clinical management of patients' long term conditions?

6.1. **Summary**

The overall message of positive feedback to the NN team from patients and families was reported by others involved in their care. The different amount of time the NN team had for patients compared to the district nursing service was commented on by all. There was also reported evidence of improved clinical outcomes in long term condition management for some groups of patients. Some GPs described an initial learning process in how to work together to meet patients' needs. The challenge reported by all is the lack of patient record interface between the NN team (and more widely community nursing, other specialist teams) and general practice.

We turn now to consider data from the patient caseload.

7. The Neighbourhood Nurse Team Patient Caseload and Care Delivered.

Anonymised data from the Carenote records of the 100 patients referred to the Neighbourhood Nursing (NN) team from November to the end of May 2017 (i.e. 194 days) were given to the evaluation team. The anonymised data was of specific fields and not free text clinical notes. A number of caveats were given by GSTT regarding the data in that there had been a revision of the Carenotes system in the period. The NN team, in common with all the DN teams, had experienced some problems leading to inconsistencies in data entry which had since been resolved with additional training.

7.1. Patient referrals

The majority of patient referrals to the NN team came from general practice (Table 2) which is the same for the GSTT district nursing service (79% GP referrals and 15% hospital referrals[13]). The most common reason recorded for referral is for 'assessment' which is the same within the district nursing service data where similarly the majority of patients do not have the reason for referral recorded [13].

	Number
Patients referred	100
Duplicates excluded	3
Source of referral	
GPs	74
Hospital	15
DN/Community Matron/CNS	5
Self referral	2
Hospice	1
Occupational Therapy Service	1
Practice Nurse	1
Other	1
Reason for referral	
Anxiety	1
Assessment	25
Treatment	3
Not given	71
Number of referrals accepted	80
Numbers declined	17
Reason	
Duplicate referral	1
Transferred to other provider	2
Patient rejected	3
Inappropriate referral	2
Admitted to hospice or hospital	2
Not supported	7
Number discharged	56
Number active	27

Table 2 Referrals and acceptance to the neighbourhood Nursing Team 1 November 2016 – 31st May 2017

7.2. Patient characteristics

The NN patient demographic characteristics are similar to that of the patients using the district nursing service in gender composition but slightly younger with 51% over the age of 75 compared to 84% of

DN service patients (see table 3). 43% of the NN team patients were of white origin (British, Irish, Scottish, other) and 30% of Black origin (British, Caribbean, African, other).

	NN team (%)	District nursing service (%)[13]
Female	50 (62.5)	12884 (60)
Male	30 (37.5)	8531 (40)
Age Groups		
<25	0	99(<1)
25-34	0	195 (1)
35-44	1 (1.4)	417(3)
45-54	5 (7.0)	1132 (5)
55-64	14 (19.7)	2052(10)
65-74	15 (21.1)	3389 (16)
75-84	22 (31.0)	6416 (30)
85-94	14 (19.7)	6782 (32)
95-106	0	945 (4)

Table 3 Patient demographics of the NN team and the DN service

In the absence of a diagnostic group category or other case mix descriptor, the evaluation team categorised each patient record into one of three types on the basis of the types of nursing care activities recorded and the length of time on the case load. These categories were:

- Palliative care (PC). This category was assigned if any of the activities recorded stated palliative care.
- Long-term disease or condition health care (LTCC). This was assigned if there was any activity code relating to a long term condition e.g. diabetes, leg ulcer, dementia, etc.)
- Short-term health care (STC). This was assigned if the patient received care for less than 14 days and included activities such as venepuncture, post hospital discharge wound care etc.).

A small number of patients were in the palliative care category with the remainder evenly split between the short term and long term care category (see table 4).

Category of care given	Number of Patients (%)
Short-term care	30 (42.3)
Long-term condition care	33 (46.5)
Palliative care	8 (41.3)

Table 4 The categorisation of patients by the overall type of care received

7.3. Activity with patients

Method of consultation

The nurses recorded in these records 2,269 face to face appointments with patients and 2,267 telephone consultations and follow up telephone consultations. While the evaluation team did not have exact comparative data for the district nursing service, the activity of telephone consultation and follow up telephone consultation was recorded on 135 of the 303,510 appointments with patients over 5 months by the service. This suggests the NN team had a different approach to communication with

their patients than the DN service, supported in part by the observations reported in Section 5. It may also reflect a difference in recording care.

Frequency and duration of contact

The frequency, duration and time in contact with the patients varies by patient care group as expected with those designated palliative care with, on average, the most appointments and greatest amount of contact time (see table 5).

For those patients in the long term care category the pattern of contact varied which may be due to a variety of patient needs which is not possible to capture from this data and needs to be addressed for future evaluations. It may also be the result of variety in nursing practice between nursing staff. It was evident from discussions with the nurses that the team practice evolved over time and approaches to practice varied between individuals.

	Total number of appointments	Duration (days) of receiving care	Total amount of time (min) of receiving care
Short-term care patients (n=30)			
Mean (SD)	2.5 (1.8)	5.9 (6.1)	102.5 (112.9)
Median	2.00	4.00	68.5
Minimum	1	1	10
Maximum	8	27	600
Long-term condition care patients (n=33)			
Mean (SD)	34.6 (36.5)	82.5 (47.3)	1444.4 (1766.1)
Median	25.0	79.8	890.0
Minimum	5	19	230
Maximum	176	194	9349
Palliative care (n=8)			
Mean (SD)	51.1 (40.3)	55.5 (21.3)	2556.6 (2083.7)
Median	38.5	61.0	2154.0
Minimum	9	21	365
Maximum	118	88	5920

Table 5. Descriptive characteristics of provided care (total number of appointments, duration of receiving care, total amount of time spent on care)

One proxy mechanism used to judge activity and resource of district nursing is to consider the ratio of whole time equivalent clinical staff to patients. The NHS Benchmarking Project [15] for community nursing uses this measure. The average for England from the participating services in 2016 was 44 patients per clinical whole time equivalent (WTE) and for GSTT 26 per clinical WTE. This measure takes no account of the case-mix of patients or other services that may provide nursing in the home. It should be noted if considering caseload in relation to the numbers of NN team members, the team also undertake activities as a self-managing team not usually within the remit of the front line clinical staff in other district nursing services.

7.4. **Personal care and meal preparation**

One aspect that is different for the NN team from the DN service was the organisational permission to provide personal care and meal preparation –activities that are usually considered a social care responsibility. In discussion with the NN team they had implemented providing personal care and meal preparation in the short term while Local Authority funded care packages were established. As noted in the observation they offered at each visit to make drinks.

Meal preparation and personal care activities were recorded to patients categorised as receiving long-term condition care or palliative care. Meal preparation was undertaken by the NN team 62 times with 12 patients and personal care 77 times, with 13 clients. Six clients received both meal preparation and personal care. This is noticeably different from that reported by the district nursing service. From April 2016 to March 2017 the district nursing service recorded meal preparation as an activity 57 times and personal care 120 times in 303,510 appointments.

7.5. Discharge and Patient Outcomes

Of the 80 patients, 45 had been discharged. The majority of patients were discharged as the planned activity was completed (table 6).

Reason for discharge from the caseload	Number (n=45)
Activity completed	32
Died	6
Admitted to hospital	5
Discharged to hospital at home service	1
Patient requested discharge	1

Table 6 Reasons for discharge

No outcome or process-outcome data could be provided. This is an issue with most community nursing recording systems and one that Buurtzorg have overcome by using the American OMAHA [5] system of recording nursing objectives and outcomes.

Questions for consideration

Does the younger demographic profile of the NN team patient than that of the DN service remain over a longer period of time or is it a reflection of the implementation phase of the new team?

Can a system of categorising the patient case mix be introduced which also captures acuity , outcomes and change over time ?

Do patterns of contact become more evident when the NN team is a stable group of staff? Is this also evident in the district nursing service?

Does the flexibility of the NN team, which allows them to offer short term meal preparation and personal care, effect decisions as to whether to support patients to be cared for at home rather than admitted to hospital or facilitate earlier discharge?

7.6. Summary

This section has given some insight into the patients on the NN team caseload until late May 2017 and the activity with those patients. Some comparative data has been used from the district nursing service to highlight some similarities and differences.   However, it is apparent that a longer period is required both to have more patients receiving NN team care but also to examine trends over time.

We turn now to reporting the neighbourhood nurses' perspective of the Test and Learn pilot.

8. Nurses experience of Neighbourhood Nursing

The experience from the nurses' perspective was gathered through regular monthly group interviews with the team – which was a changing group of people as new members joined and then some left either to form the second team or from Neighbourhood Nursing team.

All of the NN team members in these meetings were enthusiastic and had chosen to work in this 'Test and Learn' pilot.

It was evident that nurses were implementing and iteratively learning over this period from multiple innovations including:

- Forming a team from scratch (as well as continually bringing in new members),
- Being a self-managing team with a coach within an established organisation,
- Using Buurtzorg techniques for self-management of the team,
- Establishing their joint understanding and agreed rules of their nursing practice*,
- Practicing community nursing without boundaries e.g. including meal preparation.

*NB the NN team were expected to comply with all GSTT clinical policies and guidance for community nursing

It should be noted that some of the nurses were also learning to work in the community for the first time. They were therefore learning about practicing nursing in the community and in people's homes. Others had previously worked in district nursing services and were able to compare and contrast their experiences.

The first group of nurses described themselves as just creating their own way forward. They seized the initiative and drew up their proposals of how they would work and sent them to the managers. They did this using a Buurtzorg principle for solution focused meetings where proposals are made to be then voted on or others have to make counter proposals. As there were no counter proposals received (as far as the evaluation team understood) the NN team proceeded with their proposals.

We now provide the team members' accounts of their experiences in this period under the two main themes:

- Pleasure and satisfaction in their work.
- Challenges and frustrations in their work.

We offer some comparative evidence from a group discussion with staff in part of the district nursing service. We finish this section with the advice the NN team offered to others establishing such teams as this.

8.1. Pleasure and satisfaction in their work

The NN team members described themselves throughout the period as enjoying their work (which is not to say it didn't have frustrations and challenges as outlined in the following section):

"I enjoy everyday – everyday is a pleasure".

"*It's the best job in the world*".

Positive feedback from patients and others

The main source of their pleasure and satisfaction was from their direct work with patients and family carers. The satisfaction was from knowing that they were:

> "*Helping the patient reach their first objective, it's such a good feeling*",

> "*Providing good holistic care, it fulfils me'*,

> "*Looking at the wider picture to see how we can help*".

They gave multiple accounts of positive, appreciative feedback from patients and carers as in these exemplars:

> "*She* [family carer] *told me we had managed to do things for her* [a relative] *by* [nursing care and organising help from another service] *that had really changed their lives and she felt so much better. That no one before we were involved had managed this*".

> "*You could just see from the smile on the grandson and the patient's face* [on supporting a return to mobility that meant the patient was able to walk outside the home for the first time in a long time] *that the nursing team had really achieved something important in their lives*".

> "*This was a patient who was happy to see the neighbourhood nurses and this was the first time she had been 'happy' to see any health care professionals because we had helped make a difference for her*".

They also described receiving positive feedback from GPs, and allied health professionals on their different approach to working with patients and the resulting achievements and outcomes for the patients. Increased patient referrals from GPs were reported as another measure of positive feedback, which they saw as demonstrating greater trust in the NN team.

Positive experience of team working and self-management

The team members also described satisfaction in working together collectively to provide the service:

> "*Talking together* [about the care of a patient] *gives us wider ideas and approach to provide care*"

> "*Many heads together makes better work*"

> "*We had this complex, challenging patient with many problems and we managed to progress the situation – through working together as team with one approach.* [Evaluator so what was that approach?] *. We all agreed to a non-judgemental approach , so we listened to the patient and validated their experience and agreed small things to work on and we managed to help this patient to make their problems a bit less*".

They described that having new members join was positive as that brought people with more ideas, and different experiences to their nursing practice discussions.

Some of the nurses contrasted this team approach to their experience in district nursing services. In other district nursing teams their experience had been that each staff member had their list of patients for the shift and the responsibility was theirs alone. There had been no sense of collectively problem solving or helping each other to complete the necessary work in that shift. New members joining described the commitment to team working and sharing the work in the NN team as "*amazing*".

So while there was team working in patient care delivery, the other element was to be a collective self-managing team inside a large organisation.

Team members described the process of continually learning how to work in this way and as self-managing team. They talked of having to "*unlearn*" previous ways of working in the NHS such as dependency on a manager for all decisions:

> "*I have to remind myself we are a self-managing team and I need to think about how I will find out things and how we will decide*".

They talked of having to consciously put aside learnt attitudes about hierarchical levels as equating to the amount of knowledge or ideas an individual could contribute:

> "*You've got to put aside 'banding'* [i.e. the salary scale an individual is on in the NHS and denoting seniority in the hierarchy] *and understand everyone can contribute*".

'Flexibility' and *'open-mindedness'* were reported as attitudes that were demonstrated within the team and seen as positives in the team working together.

They described later in the time period how the team members needed to keep reminding themselves collectively of these principals to ensure they were truly embedded in all their interactions as it was very easy to return to past learnt behaviours.

The NN team as self-managing undertook activities which would normally be assigned to managers such as recruitment of new staff. The NN team collectively agreed to new appointments. Being involved in this type of activity was described in very positive terms. However, the team also described the challenges regarding undertaking work prior to having '*back office*' support. See the section on challenges below.

While there were formal (rotating) roles within the team such as responsibility for the staffing rota and chairing the weekly meeting, it was evident in observing meetings that individual members took on less specified roles at different times. Examples included: being the expert on aspects of information technology and provider(s) of positive feedback and appreciation to other members.

The team members valued the coach and the role the coach played both within the team but also as a '*protective layer*' between the team and the wider GSTT organisation. They reported the coach role as very important in the implementation and in their development as a team. They also recognised it as a difficult role which sat between the NN team and the wider GSTT organisation. Team members described their surprise and pleasure in the level of positive support they had from some senior managers to try this self-management model.

Positive experiences of professional development and staff wellbeing
Members of the team often referred to the importance of the health and well-being of themselves as providers of health care. Individuals described how walking was beneficial, although previous cyclists suggested that cycling was even more beneficial. The importance of work –life balance to the team members was evident in the team negotiations in meetings about planning shifts and covering the work. It was observed that additional hours worked were also given back to individuals as time in lieu by agreement of the team.

Team members also described satisfaction in their work derived from opportunities to learn new skills and knowledge.

"I've grown as the named nurse and learnt clinically new skills. I'm looking to learn how to titrate insulin".

The team was described as very supportive to the professional development of each other and this was often contrasted to other work experience. The non-hierarchical nature of the team meant team members were able to develop new skills or build experience in activities usually reserved to NHS staff of certain grades – involvement in the recruitment process being one example.

Positive views of growth of the team and forming two teams
Team members saw the growth of the team numbers and then the establishment of the second team in positive terms. More members meant more ideas and experience as described above but also meant more capacity to increase the numbers of patients cared for. The NN team members recognised that a greater number of patients were important for evaluation. The opportunity to have two teams was seen in similar terms. While the decision to have two teams was made at the 'Test and Learn' Board level, decisions about staffing and safe ways of working during the transition were made by the team.

It was evident to the evaluators, through observing the team on a regular basis, that the growth of the team resulted in more formally defining the patient group they provided home nursing for as well as other parameters of their nursing practice.

Team members described how their confidence grew over time in their clinical practice and their self-management but it was not without frustrations and challenges as described next.

8.2. **Frustrations and challenges**

Team members described their experience being one of having on going challenges: *"it's all good but it is challenging".*

Aspects that remained as challenges throughout the period were reported by the team members as:

- Navigation through the bureaucracy of the GSTT organisation,
- The extent to which the different elements and departments of GSTT recognised or accommodated this team as self-managing,
- Information technology and mobile working,
- Managing different views and opinions in the team.

The first three were interlinked and will be reported together.

A self-managing team in a large NHS organisation
As referred to in section 3 on implementation having someone in a designated '*back office*' administrative support role made a significant difference to the NN team in many ways including negotiating with the wider GSTT organisation for infrastructure support. The term 'back office' seemed to refer to a role with a skill set: seniority, knowledge and can-do attitude, able to negotiate and manage relationships with the wider GSTT administrative and support departments. It also meant someone non-clinical who saw themselves as part of the Test and Learn pilot and the team (for more discussion refer to section 9). Once there was a person designated as 'back office' the nursing staff passed over many of the GSTT administrative infrastructure interface issues they found most frustrating, slow to resolve and problematic. The types of issues included:

- Login details for new staff members to IT systems,
- Equipment for new staff members ,

- Ensuring a manager (outside of the NN team) was able to authorise for example salary payment for out of hours working to meet the deadline for the payroll run.

Many systems for agreeing use of or access to resources in GSTT (and most other large organisations) rely on authorisation by a designated manager or budget holder. The team were occasionally able to insist they were the 'managers' and could authorise but in the main found it frustrating having their requests delayed , postponed or held in limbo. Explanations given included that it was not obvious to the GSTT central administrative departments who the appropriate manager was. From some of the examples ,which were recounted in discussion, it seemed as though the infrastructure departments were not able, for whatever reason, to respond in a timely way to requests from others not just the NN team. The NN team did not hold its own budget for equipment or to aid nursing in the home or for patient continence supplies. This was the same for other district nursing teams. Authorisation was always required from a manager or specialist team. The NN team members pointed out the contradiction if they were a self-managing team as well as the delays it created in timely response to their patients' needs.

Linked to this perceived failure to recognise that the NN team as self-managing, was what the NN team perceived as variation in the extent individual managers truly acted in ways that demonstrated the NN team was self-managing. The NN team members recounted instances of decisions being made for them and having to wrest these back and of individuals fluctuating between describing them as self-managing and giving command and control type instructions.

> "*I'm surprised after all these months that GSTT are still trying to manage us*, *tell us what to do*",
>
> "*It's really irritating getting repeat emails from* [person's name] *insisting we have to do* [administrative matter] *even though we have made our position clear*",

When asked in retrospect what they would have liked to have seen happen differently in the implementation some NN team members suggested there need to be: " *more buy-in from the Trust to the concept of self-management to help break the barriers and challenge the way many processes are done now*".

Information technology and mobile working

A frustration throughout for the NN team was the information technology systems. These did not support mobile working and were viewed as cumbersome and unresponsive to their needs. The NN team members who had been the Netherlands repeatedly pointed to the Buurtzorg iPads which had electronic record software combined with the use of the OMAHA system as information technology that aided nursing practice rather than created time consuming (and unproductive) work.

> "*And IT is still a pain in the ****"*

Some of the NN team would have liked the opportunity to be part of more Test and Learn activities about improving access and use of IT to aid nursing practice as well as administrative need. They thought that the organisation could capitalise more on what their ways of working could offer to the wider organisation in improving systems for the benefit of the end user.

8.3. **Comparison with views of others in the district nursing service**

The evaluators met with others in the district nursing service to explore their views of what gave them satisfaction in their job and factors that were less satisfying. A brief summary of this is provided in

Appendix 3. A key point to note is that there are many similarities in the factors that give satisfaction to the staff in the district nursing service and the NN team: the positive feedback from patients, knowing that they had made a difference to the patient's life, achieving good clinical outcomes, working as a team and being valued and supported by their colleagues.

The list of factors the district nursing staff disliked or found frustrating was much longer and included wider system wide factors such as the 1% public sector pay cap. Some of their frustrations resonated with the patients view e.g. short visits without enough time, and lack of continuity in staff.

However it is noticeable that a number of the district nurse staff reported frustrations were addressed by the NN team model: We list these below and the way in which the NN team addressed them:

- Lack of time to complete the work – the NN team had flexibility in their working hours to meet the patient need and a caseload they could manage,
- Multiple , changing nursing staff providing care – the NN team had model of a named staff member to patient,
- Lack of ability/permission to innovate – the decision making with the NN team allowed new ideas to be tried,
- Lack of flexibility in the rota agreed at senior levels – NN team rota agreed in weekly meetings between the nurses. There was flexibility in changes as long as the staffing required was available,
- Lack of extra pay or time in lieu for extra hours worked – the NN team agreed time in lieu for extra hours worked at their weekly meetings.

There is a multiplicity of factors influencing the turnover of any staff group[16]. The research evidence for nurses suggest the following as some of the strongest evidence for factors influencing decisions to leave posts: at the individual level -nurse stress and dissatisfaction factors and at the organisational level autocratic managerial styles and little supervisory support[17]. The NN team model would appear to offer some of the mechanisms that are likely to assist in the retention of nursing staff.

8.4. **Being in a self-managing team**

The NN team made decisions in weekly meetings with the coach in attendance. It was in these that the range of administrative decisions as well as decisions as to how to manage the multiplicity of requests for the team to do something or have observers. The NN team members were conscious that these meetings could become very lengthy and tried a variety of strategies to curtail them, often referring back to the Buurtzorg principles of solution focused meetings. At one early meeting, an evaluator was observing, the NN team members commented that that they rarely managed to discuss patient care as they were dealing with administrative matters. They determined to shift the emphasis of their meetings from then on.

The NN team described not only having to "*unlearn*" dependent behaviour on managers or other more senior staff to make decisions for them but also having to "*learn*" how to make and accept decisions as a team. This included learning how to manage differing opinions in a group and commit to the decisions of the team. It was evident in some team meetings observed by members of the evaluation team that differences of opinion between team members were not always comfortable situations. It was evident to the evaluation team that voting did not always resolve some very different viewpoints on issues.

It was evident this collaborative way of working was not for everyone for example a new person joined the team and left after a very short period. The team reported that this person preferred to be in an established team rather than one starting out. Team members described having to continually revisit the ethos and principles of the self-managing team to ensure they were enacting them. One nurse commented that the team not only had to pay attention to the well-being of the patients, the nursing practice and individual staff but also had to pay attention to the well-being of the team. These were the types of themes that arose in the advice the NN team offered to others in setting up such a team, which we turn to next.

8.5. Advice for others setting up such adapted Buurtzorg teams

The NN team members were eager to share their experience and offer advice for others**.** They first reflected on their own experience of the implementation and suggested the following for the wider organisation:

- The parent organisation has to be clear on its objectives for the team to avoid confusion,
- The framework and infrastructure , including back office support, has to be in place from the beginning i.e. before the nurses take up post,
- The wider organisation has to buy in to this model in order to break the barriers and challenge the current processes,
- IT has to be in place and working.

They then turned to their nursing practice and self-managing team experience and suggested the following items for the team itself and those in roles of immediate support:
- Hold the patient as at the centre of the work and embrace the 'onion model',
- Have agreement on the patient referral criteria to the team from the beginning,
- Have a clear model of patient led objectives but also a nursing model that is focused on self-care with a time limited end point (rather than a long term relationship model),
- Invest time getting to know the neighbourhood and its resources and making relationships with others e.g. GPs, pharmacists, social services, other services,
- Think through the right number of people with the right clinical expertise for the model and the caseload,
- Use a values based approach to recruitment – team members have to have a passion for all of these three elements:
    - o Patient focused care and building relationships in care,
    - o Self-management by the team,
    - o Care in the community and people's homes,
- Make sure potential new members really think through whether a self-managing team with all members having an equal voice is really for them,
    - Team members to keep questioning why they are doing something in a particular way and be prepared to be questioned,
    - Team members to recognise the strengths and weaknesses of each other,
    - Team members to keep the values and passion in mind when there are differences of opinion and conflict,
    - This is a process of individual and collective learning i.e. taking the theory and putting it into practice as well as internalising it:
        - o Importance of reminding themselves of the model and what it is about,
        - o Importance of observing and learning from the Buurtzorg nurses and coaches,

- o Importance of the ongoing support from Buurtzorg.
- Encourage new team members in learning the principles of self-managing teams at the same time as recognising their contribution of new ideas and experience,
- Pay attention to the well-being of the team as an entity- "*care for the team*",
- The coach role is important and having someone with the right approach and belief in the model is important as it's "*a tough role*" and they are a buffer between the team and the organisation.

8.6. **Summary**

The NN team members described their high level of job satisfaction and very positive experience of the collaborative ways of working within the team. Their control over a number of aspects of their working lives contrasted with that reported by the staff in the wider district nursing service. These were aspects the DN service staff described as frustrations and problems. The frustrations the NN team reported were particularly focused on interfaces with administrative departments and IT issues. There was an on-going tension described as to whether a self-managing team was fully understood, recognised and allowed to function within a very large, multi-layered, organisation. However, the model allowed the NN team to innovate in their working practices and this offers opportunities for wider spread and learning. The question for an evaluation over a longer period is whether some of these experiences are related to the implementation of an innovation or whether they remain or change over longer periods of time.

9. Perspectives on self-managing teams within an NHS organisation

The following is drawn from interviews with senior leaders and managers in the adult community involved in different aspects of the NN team – including the initiator, managers with remits across the clinical service, administration, and dedicated NN team support roles. Inevitably the role of the interviewee influenced responses for example the coach was able to provide more detailed views on patient care issues than for example a general manager who offered views more through the lens of finance, infrastructure and back up support.

9.1. Inception, values and commitment

There was a common recognition that the trigger for introducing the self-managed team was that the current model of district nursing was unsustainable. It was seen as in crisis at one point with a reported 40% vacancy rate. Enough time for nurses to provide care was reported as a big issue. District nurses were reported to feel their care was undermined by not having enough time to do it. One senior manager commented: "*When I talked to nurses....they would tell me, we are very good, well trained, but you are not giving us time to care, we have been turned into a task orientated service*".

The senior managers understood and recognised the Buurtzorg values of: person centred care, the holistic approach (blending psycho-social approaches with nursing care), continuity and seeing things through and valuing time. One interviewee described it as "*back to the future*". Having said that managers were also realistic about the challenge of implementing holistic Buurtzorg approach into a system and large organisation where patient demand was higher and needs were complex alongside an acute shortage of trained staff. Although there was enthusiasm and commitment, there were lots of questions raised about lack of system readiness at the "*get go*", interdependencies and interoperability between the NN team and rest of the system and skill mix/experience of the NN team. These issues are explored further below through the lens of the interviewees.

9.2. Early successes and organisational readiness

There were common views across all interviewees that the model was bedding in well with good feedback from patients and families, with a positive reception from district nurses and general practitioners. There was a suggestion that some managers were less positive through concerns in the longer term a management layer would be stripped out "*bit like turkeys voting for Christmas*".
Interviewees broadly held the view that "*we have done well to protect nurses from the organisational bureaucracy and keep them in the Buurtzorg model as far as possible*". Other successes noted were the coach, who was seen as having the right enabling and solutions focused skills and used time effectively. The Dutch Buurtzorg team was seen as very supportive communicating with them by email, skype, occasional visits "*she challenges us…keeps us on track re the principles of the model*".

While the "*team and delivery*" was seen to be working well, all interviewees in different ways pointed out that "*the headaches are the organisation itself*". There was a strong view that a key limitation (at this start up stage) of the Buurtzorg implementation was a lack of organisational readiness and insufficient planning had gone into setting up the back office. Examples of this lack of planning included:
- Lack of clarity on budget processes and tracking money flows e.g. to "*show how costs are moved across different cost centres*",
- Unrealistic initial expectations e.g. NN team nurses finding their own premises,

- Lack of a business support function – therefore confusion over the interdependencies e.g. with IT and interoperability e.g. how to order a Doppler, who signed it off etc.,
- Lack of attention to understand roles, responsibilities, pinch points, referral and performance data.

The appointment of a dedicated 'back office' role was a welcome solution to many of these issues. Although there was one view that ,while those around the Test and Learn pilot were committed to it, it wasn't apparent that people and departments in the wider organisation understood or were ready for such a concept as a self-managing team.

9.3. **The nursing team and establishing neighbourhood nursing "Buurtzorg" style**

Unlike the initial delays in providing the 'back office' function, interviewees discussed the thought and effort that had gone into recruitment of the nursing team using a "*strength based approach*" and values based assessment. Selection focused on staff who could think outside the box, innovators, leaders, but not just leaders also followers – initially no one was recruited with out of hospital experience, but as time went on community experience was added. The strength based approach to recruitment was seen to be very successful and considered as something that should be tried more widely in the organisation. The coach's role – especially at the beginning was seen as a) "*helping them find their feet*"; b) supporting them to think through how they define solutions and make decisions; c) "*helping to unlearn the NHS mind-set*".

Key differences with core district nursing service were reported to be:
- Managing referrals responsively,
- Flexibility in managing rota and cover with shifts arranged around the needs of patients rather than patient care having to fit into the schedules of district nursing,
- More continuity of care and longer time spent with patient.

There were initially some skills deficits noted and training was provided on a need to know basis such as training in setting up and using a syringe driver for a palliative care patient. It was commented on that with a very small number of complex patients where the team struggled to agree a care plan and manage the patient. One observation was that it "*became clear that the team needs to have some experienced staff….makes it more expensive.*" Having the right mix of experience in the nursing team was seen as important to achieve quality.

Central features of Buurtzorg are the team self-management and nurses undertaking personal care activities and taking as long with the patient as is needed. These were noted as key differences compared to the district nursing service. All GSTT clinical principles and policies were reported to apply to the NN team e.g. reporting of serious incidents. But the NN team undertook their own organisation of the rota, shifts and weekend work and application of policies like annual leave. While the team got rid of uniforms, which was agreed although not necessarily liked by the GSTT managers, they also proposed their identification badges which was not agreed by GSTT managers.

9.4. **Intermediate impact and outcomes**

There were no adverse incidents reported. There was reported to be one patient complaint. This was dealt with through root cause analysis and an explanation provided to the patient within 24 hours and patient reported to be very satisfied. It was noted by the interviewee that the process was much quicker as it did not need to go through the layers of management.

In terms of patient experience – the feedback reported to these interviewees had been very positive and reflected the Buurtzorg relationship between nurse and patient which was described as "*continuous and intensive*" – with the potential to develop a deep relationship. Examples of NN team activities to improve the outcomes for patients were described such as:

- Patient visited in hospital by NN nurse to discuss discharge planning, which then took place smoothly,
- Patient not eating healthily, NN nurse took patient to a market to look and discuss fruit and vegetables,
- Patient due a diabetic review but had a history of defaulting appointments so NN nurse accompanied the patient to the clinic, review completed and diabetes stabilising,
- Patient refused to have a hospital bed installed at home which had been recommended to help safe nursing care. NN nurse tried a different tack, stopped pushing it and concentrated on building relationships over cups of coffee till patient reflected "*Maybe I should have one*",
- Patient with a chronic leg ulcer who had nurses dressing it for years. The NN nurses researched options, tried out different treatments with feedback from patient until a suitable treatment was found and the wound healed,
- Positive stories about end of life care and bereavement support.

The impact on other staff was not reported as an issue. The district nurses were said to be "*curious*" to see how the model might influence what they are doing. The GPs were reported as supportive.

The impact on costs was reported to be too early to assess. At this point the model was funded from vacant posts. There was thought to be an impact on adjacent district nursing services with a reduction in workload. The ways to measure impact on costs were being discussed by managers. There were interesting suggestions "*need to be nuanced in how to evaluate costs…not just about costs also productivity*". An example was given to illustrate this point, "*If a patient has been on the caseload for years with a twice a day visit that has been reduced to once a week because now* [they are] *self-managing, that is so much better*". Other aspects were also discussed such as the rate of processing patient referrals "*massive opportunity to save on paper and time from streamlined decision-making*", patient hospital readmission rates, the number of serious incidents and patient complaints as well as the friends and family test.

Interviewees were keen to assess the impact on staff and staffing. While the vacancy rate had been high (at 40%) it was reduced during the period of the Test and Learn to 24% with a target of 15% for late 2017. Other aspects they were interested in included looking at the impact on job satisfaction and turnover and sickness rates.

9.5. **Summary**

Those in leadership and management positions in GSTT concerned with the Test and Learn pilot were interviewed at different points. The interviewees reflected commitment to but also questioning as to the value and impact of an adapted Buurtzorg model in an inner London setting. All reported an organisational learning process which included the need for the 'back office' role to be there before or as the NN team started and a mix of experienced with less experienced staff in the team. The interviewees reported positive feedback from patients and families but were considering ways to understand the impact on costs, productivity and staffing. Some interviewees reflected on the readiness of the wider management cadre and infrastructure departments to embrace the concept of self-managing teams.

10. Organisation costs and productivity

In this section of the report, we address cost and productivity issues arising from the initial project to introduce Neighbourhood Nursing (NN) in GSTT and the wider issues surrounding a complete evaluation of a different approach to community nursing.

10.1. Background

Before considering the current project in detail, it is important to note that the cost-effectiveness of community nursing is not a clear-cut issue. The nature of community nursing care is highly heterogeneous (compared to a single disease – single pill evaluation) and data collection in many community health systems prevents full assessment of patients' health, inputs by nurses and outcomes.

Effectiveness of community nursing is often linked to claimed benefits of reduced hospitalisation of patients after community nursing involvement. However, the evidence for this effect is limited because of the data required to monitor heterogeneous patients over sufficient time to demonstrate an effect on hospitalisation. Even where a narrower group of patients has been studied, where hospital admission avoidance is the key outcome, the evidence for the effectiveness of care at home is limited. A recent Cochrane review concluded that hospital at home may provide an effective alternative to inpatient care for selected elderly people but the evidence is limited by the small trials that have been carried out.

In the NHS in England, community nursing is also funded by block contracts rather than a fee or tariff per patient or patient visit. This means there is no direct cost per patient to the NHS, as there is for hospital care, and so no clear, standardised costs to set beside any outcomes data. There are, however, some costings used by researchers which provide an outline indication of the direct and indirect costs of community nursing and we report these later in this section.

It should also be noted that the Buurtzorg organisation itself has not claimed large savings from its introduction but rather a different use of resources and greater freedom of action for nurses. The KPMG[19] report indicates that Buurtzorg nursing teams have a higher cost per hour of care, slightly fewer hours of care per patient per month and a shorter duration of care in months per patient. That is, reflecting an emphasis on self-care and self-management, Buurtzorg nurses visit a little less than average for a shorter time but have a higher cost per hour, presumably because of staff grading and charging. The overall result is a lower cost per patient than for most other care providers in the Netherlands.

The emphasis on self-management would lead us to expect a shorter duration of care as the patient takes on more of their own care but without clear health status and health outcome measures, discharge from the home nursing programme only tells us that care at home stopped. Earlier ending of home care is compatible with both good and bad outcomes.

The KPMG report [19] also notes that hospital expenditure on patients in the Buurtzorg teams' patients was higher though we have not fully established the time period over which hospital expenditure was measured. Because many community nursing patients will have complex health problems, their hospital admissions and hospital attendances may change significantly over time, with the relevant time period extending to years rather than weeks. Higher spending by hospitals on such patients in the year of their Buurtzorg team care could indicate early interventions with a significant payback later but there is no conclusive evidence in the assessment as it was limited in its follow-up period.

10.2. **Our evaluation**

We have not been able to produce detailed findings on the potential costs or cost savings associated with the introduction of Buurtzorg neighbourhood nursing teams into an NHS community nursing service. There are a number of reasons for this as detailed below.

The evaluation has been taking place during implementation and so, while the NN team was relatively small, there were relatively few patients for an assessment of the direct costs of nursing inputs to patients.

While the NN team eventually received some back-office support, we have no data on the extent to which payroll, HR and other functions continued to be provided by GSTT. Our understanding is that the NN team support was more limited in its scope and so even if detailed costs were available on this support, it would not provide the costs of administrative support of all kinds. This would only come about if the NN team became fully independent and had to procure support itself from private or public sector providers,

The data available from GSTT community systems is limited. In consequence, it is not feasible to compare direct costs of care. This problem is compounded by the lack of detailed data on patient case mix. Without details of diagnosis, it is not possible to compare similar patients, receiving NN or conventional nursing care, to identify differences in the duration and intensity of care packages. A more intensive level of care for a shorter period is a key finding from a detailed evaluation of Buurtzorg in the Netherlands, by KPMG [19] but without a large number of patients, much larger than the number seen to date by the NN team(s), it is not possible to derive conclusions on average costs, even if more detailed activity and patient data was available.

Given that NN nurses may carry out some elements of social care for their patients, as they see fit, it is possible that NN patients receive more or less social care than patients receiving care from the established local community nursing services in the GSTT area. While the contribution of social care to longer term outcomes may be difficult to assess, it would be important for a full evaluation to know if social care services are maintained, increased by NN nurses, increased by NN initiatives with local social care providers or reduced to offset some activities carried out by NN nurses. The same is true for personal and social care provided by family members, which could increase, decrease or be unchanged by NN care instead of DN approaches to care.

While patient satisfaction can be measured relatively easily in almost any care regime, if patients are willing to be involved, other outcomes, particularly health outcomes, are very difficult to compare. This is because they may be influenced by past care as well as recent care and may change following an episode of community care. We have not seen data on hospital use in the past by patients receiving NN services and would not expect to see reliable data on future health service use after NN for at least two years after care.

The nurses involved in NN have reported a number of benefits from the new ways of working (section 8). Given the past difficulties of recruitment and retention of nurses in the community in GSTT, staff satisfaction could be an important element in maintaining the workforce locally. While this can be identified from responses from the nurses, it could be further examined through an assessment of staff retention rates in NN and conventional nursing services over the months and years ahead.

A further potential benefit of NN is that nurses spend more time with patients. This could follow from the plan that NN nurses walk between patients and would be reinforced if the nurses spend less time

in management meetings or management-related activities than their colleagues in conventional nursing services. However, in our evaluation, with patient numbers building up slowly and with a significant number of early patients requiring only a simple activity such as taking blood, we are not in a position to report whether the current NN scheme is leading to more time with patients. NN nurses are also involved in coaching and there are project group management activities that may reduce the input of time to patients, at least in the early stages of NN. In common with cost data and hospital use data, activity data would need to be collected on large numbers of patients for at least one year and after the NN service had "settled down".

A full evaluation of NN in GSTT would therefore require a longer period of time to accumulate data and much more detailed data than is currently available. The study by KPMG [19] provides a good model of the kind of evaluation that might be carried out, in time, though even this very detailed study does not include longer term health outcomes, so far as we are aware (from a translated copy of the report). We have also identified a wider review of material on Buurtzorg nursing [20], which draws on several reports commissioned on its operation across the Netherlands ((Note that Medium.com is a website dedicated to providing information about innovation of all kinds and we do not know what peer-review processes it has in place.)

Key findings include:

- Buurtzorg nurses spend slightly less time providing care per client per month than the average for other nurses;
- Buurtzorg nurses typically see patients for a shorter period of time, measured in months, than nurses in most other care services;
- As a result, home care hours per client per year are relatively low for Buurtzorg, compared to other nursing services;
- Hourly rates for Buurtzorg are towards the top end for nursing services but, when combined with hours of care and duration (months) the overall cost per client is below the median cost for nursing services;
- The ongoing hospital and other healthcare costs for Buurtzorg clients tend to be towards the higher end of the spread of patients receiving home nursing services. This could be because they are in poorer health, before or after a Buurtzorg intervention, but it could also be because Buurtzorg nurses are better at identifying problems that require further medical intervention;
- The overall cost per client in Buurtzorg is lower than the median for clients of other services.

To identify whether the NN team in GSTT is achieving these outcomes would require a long-term study with a large number of patients to give statistical confidence in the results.

10.3.   A Full Evaluation

To replicate the data available on Buurtzorg nursing in the Netherlands, a study in GSTT would require:

- Detailed and accurate data on the time spent by nurses with patients;
- Detailed and accurate data on other activities carried out by nurses, including travel, training, patient-related admin and other admin;
- Detailed care records which could be easily searched to quantify the time period for which care was provided and the intensity in hours per month during the course of care;

- Details of direct pay, national insurance and pensions for NN and other nurses, at least in the form of averages and taking account of e.g. recruitment strategies to recruit less experience nurses to community work;
- Estimates of the overhead costs of administration and management for NN nurses and for other nursing services. NHS systems do not make it easy to net out the overhead costs of a large and complex trust such as GSTT. Regular estimates of the costs of nursing with and without overheads are prepared by the Personal Social Services Research Unit (PSSRU) and these provide estimates of costs with and without indirect costs. Other sources could include data on the costs of agency or private sector nurses, where elements of overheads may or may not be included. However, use of private sector data would also require, if possible, details of profits and other financial elements in their accounts. This would be potentially difficult to obtain. A further source would be organisations which provide professional services, e.g. payroll, HR services, which might be a source of estimates of the potential overhead costs if NN was provided on a fully independent basis;
- Estimates of social care provided at home, including formal and informal care, as NN nurses may be substituting for social care or they may be able to increase the social care provided to their patients;
- Detailed records on patients' use of hospital and GP services during an episode of care provided by NN or comparator groups of nurses and, ideally, the same detailed data before and after the episode of care for two years. This data would also ideally be standardised for age, sex, access to live-in carer, diagnosis and stage of disease, (e.g. insulin dependent diabetic, non-insulin dependent diabetic) so that comparisons of costs of other services could be based on directly comparable patients. Without this data it would be difficult to conclude that patients were receiving more or less healthcare resources under the NN care regime.

To provide an insight into the potential health gains from a different approach, with more reliance on self-management of their health by patients, it would be valuable to have regular assessments of the health state of patients. Ideally, this would include an assessment using a standardised and validated instrument for assessing the health of the kind of patients seen by NN services. However, as it is established that social networks also play a part in long term health outcomes[21],it would also be valuable to measure the extent of social networks as well as direct formal and informal care for patients.

A related measure would be the time from NN package of care to entry to a more supportive environment, typically residential or nursing home, or to death. However, entry to a care home may depend on a wide range of medical, social and financial factors and so differences between patients would not provide a reliable estimate of the impact of NN unless the numbers of patients included were relatively large.

Overall, patients of community nursing services have many different problems, extending over long periods of time, so that the effective extraction of relevant data on their health outcomes is very difficult and timely. Without extensive follow-up and retrospective evidence of the use of other services for large numbers of patients, we cannot know the impact of NN compared with CN services.

Given the complexity of a full assessment, it is tempting to plan for a much less difficult evaluation, for example answering the following questions:

- Do the NN nursing services cost more or less, in total and per patient?
- Do NN patients have higher or lower levels of satisfaction?

- Do NN team staff members have higher or lower levels of satisfaction?

The direct input of nursing time to patients and its associated costs could be estimated from improved data recording of nurses' time. However, as the NN nurses also provide elements of social care, it would be important to record the inputs of social care for each patient. This could be maintained under NN care or could fall as NN nurses take on part of the work of social care. Any savings here would potentially be a benefit of NN care though there is also a potential risk that NN care would lead to a reduction in social care that more than offset their input of time. That is, social services might "leave these clients to the nurses". However, an alternative view might be of joint funding sources for such work as mutually beneficial.

A major component of the claimed benefits of Buurtzorg NN teams is a reduction in overheads from removal of layers of management. To assess this, estimates or direct expenditure on indirect costs would also be needed for a full evaluation.

The Personal Social Services Research Unit (PSSRU) has produced unit costs for NHS staff for many years for use in research studies and modelling of cost-effectiveness. Their analysis is based on pay scales and scrutiny of a limited number of community trust accounts. Their estimates for community nurses in 2016 suggest that the overhead cost, on top of direct pay, pension and national insurance for community nurses is around 75 per cent [22]. That is, an NHS trust is likely to incur costs of three quarters of the cost of each community nurse in the management of staff, payroll, HR and accommodation costs. Taken at face value, this suggests that the potential savings from the NN model could be considerable. However, without market testing of such services, it is difficult to know just how much they might have to pay for back-office services and accommodation. While the numbers in NN teams remain small, there is the further difficulty that small groups may get a bad deal from large back-office companies and so not achieve the potential savings noted.

The PSSRU hourly cost (including indirect and overhead costs) of about £36 per working hour for a Band 5 community nurse would provide an appropriate starting point for a fuller calculation of the potential savings from the introduction of NN teams. If, for example, evidence could be found of private sector agencies providing home nursing for a lower cost per hour, this would suggest that savings were possible. However, private sector nursing agencies do not typically advertise their costs per hour as they rely on initial assessments before committing to costs. A brief internet search also suggests that these agencies focus on relatively high levels of input, including live-in nurses, rather than short nursing visits of the kind provided by community nurses. Given the universal access to free community nursing in the NHS in England, it is not surprising that private agencies do not appear to emphasise relatively short visits by nurses.

In summary, it may not be possible to derive a reliable estimate of the cost of NN teams, freed of the overhead costs of a large NHS trust, until a large number of NN teams have been established completely free of their former employers.

Even if costs of NN teams could be established, this would be less valuable if it did not include use of other health services as any impact on costs of NN may be offset by their impact on patients' use of other services. Given the possibility, based on the Dutch experience, that patients receive care for a shorter period of time under NN because of the greater focus on self-management, it will be important to measure whether health outcomes are higher or equal, due to successful interventions and the development of self-management, or lower because self-management is not itself sufficiently achieved. If the outcome is based on the proxy measure that the patient must be managing because

care has been stopped, there is clearly a risk that worse outcomes will not be identified. This is not to suggest that outcomes are worse from NN, only that they are likely to be unknown for some time and possibly for ever. High levels of patient satisfaction, however, would be more likely to indicate that outcomes were at least no worse, though again these should ideally be supported by follow-up some time after the episode of NN care.

The requirements noted above for a complete study of NN nursing do not include one further element which would help achieve the most complete assessment. This is randomisation of suitable patients to NN or other nursing services. This would help to remove any differences in outcomes for patients that were due to underlying factors and not to the care provided.

If the list of data requirements appears daunting and tough to deliver, that is because it is! The research literature contains some trials of the impact of nursing services in the community but relatively few. And while it might appear unsatisfactory that we do not know what outcomes a period of community nursing achieves for patients, the same is true for many hospital treatments where no long term outcomes are monitored. Nonetheless, when changing service models, while it is appealing to accept new services if, for example, "costs are lower and outcomes are no worse", without a full assessment of outcomes and costs to other agencies, families and carers, this cannot be concluded.

11.   Concluding comments

This early view evaluation of a Test and Learn pilot of an adapted Buurtzorg model has been undertaken during the first seven months. The model offers two interacting innovations:

- A renewed focus on patient centred care,
- Self-managing team of health professionals.

This pilot as planned has had iterations introduced as the team and organisation have learnt through the period. The early view evaluation therefore offers insights and also raises questions to be considered by the NN teams and the organisation going forward.

The evidence presented here demonstrates that patients and carers were able to report a positive change in the nursing practice they experienced compared to previous experience of district nursing. Individual patients could describe how this change had resulted in direct improved clinical outcomes. Positive outcomes were reported by GPs and other health professionals although there was some surprise expressed at team members need for training in what were considered common community nursing situations. GPs and other health professionals pointed out the inefficiencies without shared patient records , also experienced across community nursing services.

Observation of the nursing practice confirmed that the NN team nursing practice was very different from the DN team nursing but noted the NN team very small patient caseload. Questions were also raised about inefficiencies in recording of care and duplication between home visiting nursing services. Examination of anonymised patient records demonstrated small numbers of patients in comparison to the staffing although this was a period when many new staff were recruited and being inducted. The analysis shows some very different patterns of nursing staff contact but without more accurate descriptions of patient case mix and acuity this is hard to interpret. One aspect was the increase NN team activities of providing short term personal care and meal preparation in comparison to the DN teams. This raises the potential for considering different joint funding models. The shift in patient contact to greater use of telephone consultations than the DN service requires more examination in its consequences. However the current absence of outcomes or process outcomes adds to the difficulties in gauging effectiveness of delivery of either type of nursing team.

The nursing staff described their experience in very positive terms but also challenging. Challenges came both from learning to work as a self-managing team but also from the extent the wider GSTT organisation recognised the concept of a self-managing team. The lack of IT systems to support mobile working (a current project in GSTT) and nursing practice compared to that on offer within the Dutch Buurtzorg service was particularly irksome.

The NN team staff offered advice for both nurses setting up such teams and also other organisations considering implementing such teams. The NN team staff and the managers in GSTT were unanimous that objectives, frameworks and most importantly 'back office' support should be in place before the nursing team starts. One point of learning has been trying to understand the optimum mix of experience and skills needed in such a nursing team. The initial group of nurses had limited experience of community nursing which changed in subsequent recruitment but raised the question as to whether some of the 'learning' in the initial phase was of learning to work in the community rather than specifically learning to work in the Buurtzorg model. Some nurses chose not to join the team following interview or joined and subsequently left suggesting this is not necessarily a model that all are comfortable with. One aspect raised for consideration was how the nursing staff experienced 'flat' structures with salaries fixed on their previous employment and as yet no clarity on career and

financial progression. Many of the working practices the NN team adopted addressed the issues that the DN nursing staff raised as aspects they disliked about their jobs (and patients also saw as problematic). The model therefore holds potential for patients and staff.

This early view evaluation was not able to address questions of cost for a number of reasons not least the evolving team, practice and infrastructure. We have offered insights into how this could be undertaken in the future and some of the challenges within that.

Appendix 1 Adult Community Nursing Service and Referral Criteria

Adult community nursing team
Providing nursing care in the local community

Contacts

Tel: 020 3049 4020 (Mondays 8am-5pm, Tuesday to Thursday 9am-5pm, Fridays 9am-7pm)

Email: gst-tr.DNreferrals@nhs.net

Out of hours

If calling out of hours, please ask for the district nurse.

- Tel: 020 7188 3299

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Our wards

Referral guide

Adult community nursing

‣ **Service overview**

‣ Patients

‣ Referrals

Overview Patients Referrals

The adult community nursing service provides professional nursing care in the community to adults over the age of 16 who are either housebound or have complex needs.

We aim to prevent unnecessary admissions to hospital and facilitate early discharge.

Our service is available 8am-11pm, 365 days a year.

Our teams of nurses are based in different localities across Lambeth and Southwark. They are led by district nursing sisters and charge nurses who work with GP practices. Community matrons sit within the district nursing teams.

Our service provides:

- Assessment and case management
- Wound management
- Leg ulcer clinics (in Southwark)
- Palliative care
- Nurse prescribing
- Medicines management
- Education and support for self care
- Bladder and bowel management

Referral criteria ^

- aged 16 year and over

- have a clear need for skilled nursing intervention

- housebound

- acutely ill, terminally ill, chronically ill and in need of clinical care, advice and support

- in need of assessment and prescribing of appropriate equipment to facilitate care in the home and manage risks and prevent complications to patients, carers and staff

- in need of assessment and treatment of continence and a proactive focus on achieving continence

- in need of catheter care and management

- in need of immunisation programs including winter flu, pneumococcal and shingles

- diagnose, treat and prescribe from the Nurse Formulary

- in need of wound management, e.g leg ulcers and surgical wounds

- tissue viability and pressure area care, with an emphasis on prevention

- medication, including intravenous antibiotics (if frequency is no more than once or twice a day) and management of central venous lines, and syringe drivers

- parental and enteral feeding

- ear syringing where other methods of wax removal and prevention of accumulation have failed.

Source: http://www.guysandstthomas.nhs.uk/our-services/adult-community-nursing/referrals.aspx#na

Appendix 2 Summary of AGE UK Patient Interviews

Summarised findings from The Age UK report[11] from interviews with 35 district nursing service patients in spring 2017.

- Twenty-nine patients were very satisfied with the standard of care. All of these felt that the district nurses were all polite and courteous.
- Two thirds of patients experienced the district nurses as generally just turning up rather than contacting by phone to confirm the time of the visit although most telephone if they are running late,
- Thirty-two patients felt that the district nurses spend as much time as they need to with them.
- Two patients described dissatisfaction with their care and making complaints which were dealt with promptly.
- The thirty-three patients that said they had no involvement in decisions about their care and generally gave the same answer summarised as *"Doctors and District Nurses know best and if that's what treatment or medication is needed then so be i*t".
- In response to the question asking the patient to tell them something they wanted to discuss with the district nurse, twenty-eight could not recall ever wanting to discuss anything with the District Nurse apart from day to day pleasantries. Seven other patients also said no but would feel happy to discuss anything if they needed to.
- Thirty-five patients said they had a good relationship with the District Nurses; that they were very professional and did what needed to be done. One patient however also described her distress at being discussed by the nurse with the GP on the phone and with the home carer in her presence but not included in the conversation.
- Thirty-four patients when asked if the nurse had given them support to care for themselves said they could not manage their care themselves and could not manage without the District Nurse visits. One patient said *"I look forward to my nurse coming she's lovely"*. One patient did her own injection with the support of the District Nurse, *"I know I can do it myself now but I like to know that I'm doing it right, I still need her here"*.
- When asked about whether the district nurses have asked or involved family members in their care, six reported they had no family. Twenty one patients reported they had family members but they have limited contact or saw them only at weekends. The district nurses had not had any contact with these. Seven said the district nurse had met family members on occasional visits. Two patients lived with relatives who were carers and they met at each visit.
- Five patients said the district nursing service was excellent and that they could not fault it. Sixteen patients said that the service was very good and eleven patients thought the service was good. Three patients said that the district nursing service could be better.
- On asking what changes should be made to improve the service:
  - 16 patients did not suggest making any changes to the district nursing service and said leave it as it is,
  - Seven wanted changes made in giving contact times and telephone contact when running late or not coming at all,
  - Five wanted the nurses to have more time with them e.g. for nurses to have less patients on their lists so they had more time ,
  - One person suggested each of the following: more information on other services, undertake nail cutting, making sure dressings and pads didn't run out, have more training.

Appendix 3 District Nursing Service Staff Views

Bullet point summary of factors that give staff in the district nursing service satisfaction and those less satisfying or frustrating.

Adapted nominal group technique interview with 14 staff

What gives them satisfaction in their work – what do they like about it ?

(Not in priority order)

1. Receiving praise and positive feedback from patients and family members. Examples given:
    a. From a wife on her husband's passing away ,
    b. Patients asking where a nurse is when others go instead,
    c. Patients are happy to see you ,
2. Being valued by patients and family,
3. Knowing you have given good care -"*it raises your morale*",
4. Satisfaction from seeing change as a result of care you have given ,i.e. making a difference Examples given :
    a. Healing wounds
    b. Discharging patients
    c. Sorting out things (e.g. medication , liaising with others) for patients
    d. Seeing the quality of life has improved for patients,
5. Meeting new patients – "*it's always interesting – especially if you have enough time to make a relationship*",
6. Being valued by your colleagues,
7. Receiving support from others in the team e.g. of ways this has happened and that they knew they were supported:
    a. Giving and receiving birthday cards,
    b. Congratulations from others on special events,
    c. We've built a team who work well together – we have a bond ,
    d. Weekly meetings where we sit down and eat together ,
    e. Support from others when untoward incidents happen e.g. patient goes missing,
8. Local managers very supportive in building a team and in clinical care

What is frustrating about your work/job ? What don't you like ?

(Not in priority order)

1. Not enough time so cut corners or leave work for others,
2. Being moved to other areas to fill gaps in rotas "*so you don't see the same group of patients or work with the same team members*",
3. Lack of continuity in caring for some patients "*Receiving patient complaints are very frustrating when you know you have done your best and everything possible – but is that true of all the others who also see that patient*?"
4. Not communicating properly between the team e.g. not passing on information that the patient has gone to a hospital appointment so won't be at home,
5. *"Have a good idea but you can't change anything – the local managers say their hands are tied".* Example given of staff rotas – made up 6 weeks ahead and have to be approved by

senior managers – so can't change shifts. This was reported as different from another workplace cited in the voluntary sector where the team had control and sorted any changes in the work rota out between themselves,

6. Not being respected by the GPs – "*go to their clinical meetings but you get a negative reception and the atmosphere is unpleasant , your input dismissed*",

7. Having to induct new members of staff frequently and the time it takes to sign them off on all competencies etc., then they leave,

8. New referrals sent through as a group at 4pm – including Fridays. "*it's a system issue but it's really hard to deal with new referrals at that point in the day*",

9. Continence assessments – "*annoying box ticking that then gets sent back to you with questions you've already completed – has to be sent elsewhere for checking and sign off to get the resources – waste of time and duplication of effort*",

10. Not appreciated by management (senior not the next level managers) – "*never thanked, never praised*",

11. Low pay – 1% cap since 2008,

12. Weekend working –" *too many week ends on the rota - would long shifts be possible instead ?"*, "*It makes your work/life balance is tricky*",

13. Traffic and congestion charge – staff have to "*pay congestion charge and reclaim from GSTT – it can mean you are out of pocket for a lot of money"* ,

14. Working beyond hours – "*no extra pay , no time in lieu*",

15. Patients saying no to treatment or care when you know it will improve their health/situation

16. Patients not at home, "*missing, where are they?*" (Interviewer asked if patients were all housebound as per referral criteria – staff said yes technically but often have mental health issues or cannot get out with some assistance so not always),

17. Abuse from patients – often those with mental health problems.

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