The Handy Approach – Quick Integrated Person Centred Support Preparation

Liliana Risi, Juliette Brown, Paul Sugarhood, Babalal Depala, Abi Olowosoyo, Cynthia Tomu, Lorena Gonzalez, Maloles Munoz-Cobo, Oladimeji Adekunle, Okumu Ogwal, Eirlys Evans, Amar Shah

ABSTRACT
Cost effective care requires comprehensive person-centred formulation of solutions. The East London NHS Foundation Trust Community Health Services in Newham have piloted models of Integrated Care called ‘Virtual Wards’ which aim to keep people living with multiple long-term conditions, well at home by minimising system complexity. These Virtual Wards comprise Interdisciplinary Teams (IDTs) with a General Practitioner (GP) seconded to provide leadership. Historically assessments have been dominated by biomedical approaches with disability emphasised over personal aspirations and ability. New professional skills are needed to organise information from diverse approaches into a common framework, which can enable agreed goals of care to be delivered collaboratively. From June 2014 to January 2016 we aimed to improve the documentation of person-centred goals of care in 100% of our assessments. Change ideas were tested and team development addressed to improve documentation of aspirations for care for people being referred and if achieved, then to test ideas to improve coproduction of care. Change ideas included Enhanced Clinical Supervision (ECS) by a GP with additional expert skills; Flash Teaching (FT) defined as five-minute weekly discussion on topics generated from the case-mix to develop a shared understanding of Integrated Care; Structured Formulation using a novel, quick, integrated assessment framework called the Handy Approach (HA) with the hand as a memory prompt to bring the personal together with the mental, social and physical domains and finally we tested focusing on ‘Team Primacy’ (mutual regard within the team) to embed behaviour change. 181 cases were tracked and documentation of personal aspirations for care by case showed: ECS 0/21 (0%); FT 5/50 (10%); ECS/FT plus the HA 35/83 (42%); Team Primacy plus ECS/FT/HA 27/27 (100%). By January 2016 prompted by using the Handy Approach in a highly functional team, all members of the IDT consistently documented personal aspirations.

PROBLEM
People now live with more long-term conditions with costs over their lifespan concentrated in their last years of life. They are asking for rational, integrated, relationship-based coproduced care to keep them well at home rather than anonymous system complexity to meet their needs. They are hoping for ‘high touch’ interactions defined as person-centred, empathetic care from professionals who know them and are able to elicit their individual abilities and perspective about their care. This is with the aim of adapting constructively to loss as they transition through their last years of life and to work in partnership to coproduce care. Attempts have been made to make care more person centred and to address these costs through piloting new models bringing health (both mental and physical) and social care together to minimise unnecessary admissions to hospital. Historically assessments have been dominated by biomedical approaches, with disability emphasised, crowding out ability and personal aspirations. Baseline assessment is core to identifying needs, decision-making, appropriate use of resources and service provision. Our aim was to document at first assessment the personal aspirations for every person referred for integrated person centred care to our service in Community Health Services Newham, by April 2016.

BACKGROUND
Integrated Care models have been piloted across the UK to address the call for person-centred care and to minimise the multiple and anonymous hospital admissions and duplicated interactions with both health and social care professionals, which are currently being delivered. At a micro-level there is evidence that highly functional Interdisciplinary Teams (IDT) can deliver integrated care. Highly functional teams
are those, which have achieved ‘Team Primacy’ after establishing cohesion, communication and clarity of roles and goals. Team primacy occurs when team members define the goals and accomplishments of the team as more important than their own and where there are behaviours demonstrating mutual regard and shared accountability for decisions.

East London NHS Foundation Trust Community Health Services has piloted models of Integrated Care called ‘Virtual Wards’ in Newham since 2014, which aim to keep people living with multiple long-term conditions well at home by minimising system complexity. These Virtual Wards comprise Interdisciplinary Teams (IDTs), which include a Physiotherapist, Occupational Therapist, Care Navigator, Community Matron, Community Psychiatric Nurse, Social Worker, and Care of the Elderly Consultant with a General Practitioner seconded to provide leadership.

In June 2014 in one of four Virtual Wards a review of referrals and first visit assessments was done to establish if person-centred care was understood and being delivered. There was confusion about the meaning of ‘avoiding an unplanned admission’ and ‘person centred’ care and how this would be measured.

It was clear that these newly configured teams needed generalist and empathetic skills to organise and distil information from diverse sources into a common framework to enable partnership in the delivery of goals of care. This is with the aim of formulating solutions for safe and effective service provision at the outset and to bring personal aspirations in line with the mental, physical and social domains of care capturing personal ability to drive care.

**BASELINE MEASUREMENT**

At baseline 20 consecutive case notes were reviewed by the QI Lead, which included 10 hospital discharge letters and 10 GP referral letters to the service and then discussed with members of the IDT. The notes were assessed to see if there was systematic documentation of the referred person’s cognitive status, their ability to consent, their function, their setting and their aspirations for care either described by themselves if they were cognitively competent or by someone else if they were unable to consent to care. It was noticed that cognitive status was only ever referenced if there was a prior diagnosis of dementia or other mental health condition in the medical history. In all of the notes reviewed the information presented focused on the physical problem and none showed documentation of individual aspirations for care to guide the Virtual Ward IDT (0% at baseline).

The QI Lead also observed that the IDT were unable to systematically organise all the information available and defaulted to the medical problem or his or her own professional approach to guide their care when presenting their assessments in meetings.

**DESIGN**

The IDT identified a two-stage aim starting with improving documentation of aspirations for care for people being referred to the service and once this was established then to focus on improving coproduction of care. A Narrative for Person-Centred Coordinated Care substiuted as the lay-partner ‘voice’ in the IDT in the first stage. This was because person centred care was the reason why the service was commissioned and there was a substantial body of evidence to support the need to document person centred aspirations as the first step in coproducing care. The project team planned to invite feedback from people referred to the service, on how well they felt goals of care were met as part of the second stage of the project and planned to involve a lay partner at that time.

The outcome measure selected was developed from the ‘I statements’ and consecutive documentation of personal aspirations of people referred to the service was measured from the question “what matters to you?”

Stage 1 started from 14/06/14 until 04/01/16 with the aim of improving the IDT documentation of the aspirations of the all the people referred for care (100%). Change ideas were developed based on learning needs generated from the IDT meetings where cases were discussed. These included supervision, education and team development. These traditional interventions may have been more diverse had a lay partner been part of the team and their presence may have increased motivation in the team to document aspirations, by providing a different perspective.

Data was collected from review of the IDT documentation after each IDT meeting (mostly weekly) where cases were summarised and presented verbally for discussion.

**STRATEGY**

PDSA Cycle 1 aimed to test if Enhanced Clinical Supervision (ECS) would change IDT behaviour in the documentation of the assessment of cognitive status, ability to consent to care and personal aspirations. ECS was defined as a clinician trained as a General Practitioner with an expert generalist background in leadership, palliative care, and strength based therapeutic approaches whose role in the IDT was to reflect with the inter-disciplinary team on support preparation. We predicted that if the IDT increased their skill in assessing cognitive status through ECS, then they would confirm consent for care and consistently document the personal aspirations of people referred to the service. A second consideration during this first PDSA cycle was attention to team cohesion as the first step in building a highly functional team, as there was limited team experience in working across professional boundaries. The process of team development was informed by the stages described in the Team Development Measure which teams need to go through to become highly functional starting with cohesion, communication, roles and goals and finally team primacy. We found that ECS did not
change behaviour and after 21 assessments, documentation of aspirations remained at baseline. The QI Lead observed that there was an embedded hierarchy in the team with allied medical members of the team (physiotherapists and occupational therapists) more likely to highlight functional ability and short-term aspirations but then later to defer to their medical colleagues physical diagnostic conclusions of the assessment. The team was at an early stage in its evolution and starting to become more cohesive. ECS may have benefitted from lay partner presence to help the team focus on the purpose of the service.

PDSA Cycle 2 aimed to test if adding an educational intervention would increase IDT documentation of personal aspirations. We predicted that if the IDT had a better understanding of Integrated Care then they would consistently document personal aspirations for care. ECS was retained to provide clinical leadership at a time of team turnover and enhance team development through attention to communication in the team as the second step in building a highly functional team. Flash Teaching (FT) was defined as onsite, five-minute weekly discussion on topics generated from the case-mix to develop a shared understanding of Integrated Care within the IDT. Twenty-four Flash Teaching topics were delivered during this cycle. Four topics related directly to team development. (See Table 1 Integrated Care Flash Curriculum of Flash Teaching Topics to improve Interdisciplinary Documentation of Aspirations). The feedback gathered during the PDSA cycle found that all members of the IDT looked forward to the Flash Teaching, as it was regular, brief and topical, being generated from their learning needs. Flash Teaching was also an opportunity to embed team behaviour through deepening an understanding of the goal of the service. However, only 10% (5/50) of assessments had documentation of aspirations during the period in which flash teaching was delivered in conjunction with ECS. Although the team were more cohesive and communication had improved through the regular email prompts with the Flash Teaching topics, they however worked in shifts and some would not be present at meetings.

PDSA Cycle 3 aimed to test if adding a quick, simple and easy to learn structured approach, which brought together the personal with the mental, the physical and the social domains with alerts would increase IDT documentation of personal aspirations. We predicted that if the IDT all used the same framework for the first assessment then this would result in consistent documentation of personal aspirations. FT was retained because it had a dual function of maintaining cohesion and communication in the team and ECS continued with the purpose of clarifying roles and goals in the team as team turnover persisted. Baseline triage and structured formulation was tested using the Handy Approach (HA), a novel untested framework, mapped on the hand, which brings the personal together with the mental the physical and the social domains. The Handy Approach is a quick integrated relationship based framework to establish person centred care as the first step in co-producing support preparation, capturing strengths alongside disability. The framework spans five domains to focus the IDT formulation towards person identified outcomes and risks. The Handy Approach can be summarised in five questions: Can you remember what you did yesterday? Do you give us permission to be involved in your care? Are you able to get out of bed? Are you alone at night? What matters to you today, this month, and this year? These are mapped on the five fingers of the hand, as a memory prompt, and start with the thumb. The domains covered begin with cognition (thumb), followed by consent (index finger), function (middle finger), setting (ring finger) and wishes/goals of care (little finger). Alerts include: any impairment in cognition; if the person is bed bound and if they live alone. Person specific hopes for care are elicited, in the assessment, through strength-based approaches and with documentation of the question: ‘What matters to you?’ taking into account the reason prompting the need for coordination of care.

A review of assessments for frailty done by the QI lead found that multiple tools existed to assess frailty with different intentions and that the tools: tended towards too much detail; were expensive to do as they demanded a lot of time from the person being assessed and from professionals to record; were dominated by biomedical information, tended not to capture wellness and few incorporated personal aspirations. These conclusions informed the simplicity in design of the Handy Approach to allow for quick, safe, baseline assessment and continuity of information within a common framework easily used by any member of the IDT. Feedback was that the Handy Approach was easy to learn and use by all members of the IDT including the Care Navigator who had no health or social care background. We found that the percentage of assessments that documented aspirations increased to 42% (35/83).

PDSA Cycle 4 aimed to test attention to Team Primacy in order to embed IDT behaviour change. Team Primacy is the last step in the development of highly functional teams and occurs when team members define the goals and accomplishments of the team as more important than their own. All FT topics during this period focused on the goal of the service. HA was retained as the data suggested special cause variation after its introduction. High team turnover had continued during the testing of the Handy Approach but with early signs of team consolidation and stability. We predicted that if the IDT achieved mutual regard for each other’s roles and goals and shared responsibility for risk, then the biomedical approach would no longer dominate the formulation of solutions and there would be more balance in assessments, which would result in consecutive documentation of personal aspirations. In the eight weeks in which this change was introduced, the documentation of aspirations increased to 100% (27/27).
<table>
<thead>
<tr>
<th>PDSA Cycle</th>
<th>PERIOD</th>
<th>Intervention</th>
<th>Team Development</th>
<th>Integrated Care Flash Curriculum of Flash Teaching Topics (Topics highlighted in bold relate to team development)</th>
<th>Cases with Individualised goals documented</th>
<th>Caseload N=181 %</th>
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<tbody>
<tr>
<td>1</td>
<td>14/06/14 – 03/08/14</td>
<td>Enhanced Clinical Supervision (ECS)</td>
<td><strong>Cohesion</strong> (Period of high team turnover)</td>
<td>Case based review</td>
<td>0</td>
<td>21 0</td>
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<tr>
<td>2</td>
<td>04/08/14 – 12/04/15</td>
<td>ECS+Flash Teaching (FT)</td>
<td><strong>Communication</strong> (Period of high team turnover)</td>
<td>24 Flash Teaching Topics Strength Based Approaches (Solution Focused Therapy, Mindfulness); Chronic Non-malignant Musculo-skeletal Pain; Allow Natural Death /DNACPR; Vitamin D Deficiency; Bereavement; Healthy Prescribing /Polypharmacy; Domestic Violence; Kindness; Recognising Dying; Managing Sleep Disorders in the Elderly; Occupational Therapy/ Empowered Living; Social Prescribing; Consent; Lower Urinary Tract Symptoms - Incontinence and Falls in Elderly People; **Restoring ‘Pride and Joy’ and abandoning fear, in our work in the NHS; Time Management; Daily Self Care in our Teams; Schwarz Rounds; ‘Hello my name is …’; Systemic Inflammatory Response Syndrome [SIRS] screening and evaluation for Red Flag Sepsis; Delirium; Subdural Haematoma in the elderly; Health Literacy; ‘What your patient is thinking’</td>
<td>5</td>
<td>50 10</td>
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<tr>
<td>3</td>
<td>13/04/15 – 01/11/15</td>
<td>ECS+FT+ Handy Approach (HA)</td>
<td><strong>Role and Goal Clarity</strong> (Period of high team turnover but onset of Team Consolidation (TC))</td>
<td>20 Flash Teaching Topics Social Capital; Medicalising unhappiness; Type 2 Diabetes - Self-monitoring of blood glucose; Mini-Cog; <strong>Social Capital in our Teams;</strong> High INR on warfarin; Labels in Older People; Sexuality in the Older Person; How would you know that what we have offered has been useful?; Hungry, Angry, Late, Tired? So H.A.L.T./Pause and Self Care; Antibiotics for Uncomplicated UTI; End of Life Care. The neglected core business of medicine; <strong>Protecting resources, promoting value;</strong> Bridge over Diagnosis; Adverse Drug Reactions and hospital admissions; DoLS - Deprivation of Liberty Safeguards in the home setting; HUDDLES ‘Improvement in health care is 20% technical and 80% human’; Personal Health Budgets; Hydration and Dehydration; Living and Dying with Dementia: Advance Preparation.</td>
<td>35</td>
<td>83 42</td>
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RESULTS

We tracked 181 people referred to our team from 14 June 2014 to 4 January 2016. None of the initial 21 (0%) had their aspirations for care documented from 14/06/14 - 03/08/14 in the period in which Enhanced Clinical Supervision (ECS) was introduced. When Flash Teaching (FT) was added to ECS, five of the 50 people (10%) had personal aspirations documented during the period from 4/8/14 - 12/4/15. Once the Handy Approach was introduced to test structured formulation, 35 people of the 83 (42%) had their personal aspirations documented in the period from 13/04/15 - 11/10/15.

In the final PDSA when ‘Team Primacy’ was established then there was consecutive documentation of aspirations for all of the 27 (100%) seen in the period from 02/11/15 - 04/01/16. Our initial tests of change produced little in terms of immediate impact but contributed to the eventual attention to ‘Team Primacy’, which together with use of the Handy Approach achieved our planned aim. (See P Chart showing IDT documentation of aspirations at IDT meetings)

LESSONS AND LIMITATIONS

Our work on changing professional behaviour towards person-centred care was possible with a combination of a stable team performing at a highly functional level along with a quick, easy to remember common framework with alerts, such as the Handy Approach for structured formulation and to enable continuity of information within the IDT from the first assessment. We felt that the Handy Approach was an easy to use generalist framework to prompt, balance and integrate information from the personal and professional domains of care. We started phase two which aimed to measure agreed delivery on goals of care but this plan was interrupted by service reconfiguration.

The Handy Approach is also an opportunity to track cognitive, social and functional trajectories from baseline in order to identify cohorts with high need. These cohorts will be those with cognitive impairment (because by necessity someone other than the person concerned will have to be involved in decisions about their care which changes the nature of care and has a significant impact on time); those who are bedbound (as this may be the beginning of the person’s transition to their last months/days of life and being bedbound increases the risk of pressure ulcers) and those who live alone or with a spouse/partner who is cognitively impaired (as this has implications for safety at night).

The Handy Approach prompts aimed to create for all the IDT members, a visual picture of the lived life of the person receiving care. This was a change idea aimed at restoring empathy and connection within the team. It became apparent early on that there was confusion in the team as to the purpose of the service, which was designed to reach people who were at high risk for admission and to deliver person centred care but little

### Table 1

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<tr>
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<tr>
<td>4</td>
<td>02/11/15 - 04/01/16</td>
<td>ECS+FT+HA Team Primacy + TC + Team Stability</td>
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<tr>
<td>Development Medicine waste - enormous potential for savings in the NHS; Heart Failure; How can GPs and Community Health Services work more effectively together?; Medical Care for the Final Years of Life; &quot;When you're 83, it’s not going to be 20 years&quot;; Loneliness; Staying with older people overnight in hospital; Social Deprivation and Costs of Care; Improving care in complex systems - if quality isn't your job, then what is your job? - Co-production. What does this mean?</td>
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<tr>
<td>%</td>
<td>27</td>
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understanding in the organisation of how these aims would be measured. Through ECS and the Flash Teaching combined the team was able with time and reflection to reframe the goals of care to ‘keeping people well at home’, which was more meaningful to the IDT.

The PDSA loops were of different durations/case numbers as there were periods of time when the caseload was low and team turnover high. We learnt that structured formulation worked best in a team that had achieved mutual regard and respectful interactions. Enhanced Clinical Supervision is necessary for leadership in teams that have not evolved to team primacy but once this level is achieved this role may no longer be necessary, as IDT members will collectively regulate the mood and purpose of the team.

High team turnover within the IDT delayed the ability of the team to evolve quickly to team primacy and a reconfiguration of the service interrupted the second stage of IDT QI work which aimed to test how well we were able to agree and deliver on agreed goals of care.

Scale up to establish sustainability is being planned to extend initial testing of data template codes for the five domains in the Handy Approach, in particular around capturing goal identification. A preconfigured template was a balancing measure because the data fields did not easily match the Handy Approach domains resulting in duplication of information entered nor did the existing template have a way of capturing aspirations.

The presence of lay partners in the training of person centred care may have brought the IDT more quickly to capturing the aspirations of care for people in the service and including a lay partner will be part of the scale up of this work.

The QI lead was familiar with the domains of the Team Development Measure and addressed the behaviours of the team through the Flash Teaching. In the period of Team Primacy all nine the Flash Teaching topics focused on the purpose of the service to consolidate IDT confidence (see Table 1). Team behaviours noted by the QI lead included: members placing goals and accomplishments of the team ahead of their own, demonstrations of care, humour and creative solutions to problems within the team. Future work would benefit from using the Team Development measure more formally.

Coproduction is a complex task requiring an understanding of what matters to the person receiving care, the person delivering care and the system paying for care. This improvement work started with operationalising ‘person centred’ care by supporting behaviour change in the IDT towards an appreciation of the value of eliciting aspirations for care as the first step. We had hoped in the second stage (coined ‘Hand in Hand’ Care) to explore the process of agreeing on goals of care.
care (achieving consensus) and delivering on these goals, taking into account resources in the system.

CONCLUSION
Person-centred formulation is core to identifying needs, collaborative decision-making, appropriate use of resources, service provision and in the management of uncertainty noting that the total burden of a person’s health expenditure over their lifespan will be concentrated in their last years of life and prioritisation of the first assessment is crucial because this sets the baseline and is the opportunity to capture ability.

In the ‘Virtual Ward’ Integrated Care pilot in Newham, we aimed to keep people living with multiple long-term conditions well at home by minimising system complexity and delivering personalised care. In order to do this we needed to establish person-centred aspirations from care in the short, medium and long term. As a result of data showing that aspirations of care were not documented, we set up an improvement project to improve the documentation of person-centred goals of care, with a plan to then focus on tracking delivery of care. Change ideas were developed by the team and included Enhanced Clinical Supervision which had no effect initially, Flash Teaching which was well received but had minimal effect, a structured approach to formulation through an integrated framework, the Handy Approach, which increased the percentage of assessments that included documented aspirations for care, and attention to ‘Team Primacy’ which enabled us to consolidate earlier work and achieve our goal of 100% of assessments having personal aspirations documented.

The project tested improving documentation of personal aspirations for care and showed that when a structured framework such as the Handy Approach was used in teams which were cohesive, communicated well, were clear on their roles and goals and who had mutual regard for each other’s skill and shared accountability for decisions, then professional behaviour shifted towards person-centred care. The Handy Approach has other potential applications which will be tested in the scale up and spread of this work. Coproduction brings together the ‘lived’ and the ‘learned’ experience and our work here has attempted to bring the ‘lived’ experience of people receiving care closer to the ‘learned’ experience of professionals delivering care.

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Declaration of interests None declared

Ethical approval The work is primarily intended to improve local care, not provide generalisable knowledge in a field of inquiry.

Explanation The work reported here meets this criterion because assessment is a universally recommended practice. We sought only to evaluate the improvements in compliance with assessment as a result of the use of a framework which incorporated personal aspirations for care alongside recommended practice.

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REFERENCES

15. Sutorius FL, Hoogendijk EO, Prins BAH, van Hout HPJ. Comparison of 10 single and stepped methods to identify frail older persons in primary care: diagnostic and prognostic accuracy. BMC Family Practice 2016;17:102

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