Developing a national District Nursing workforce planning framework

A report commissioned by NHS England

March 2014

PUBLICATIONS GATEWAY REFERENCE 01518

Contents

Executive Summary

The QNI was commissioned by NHS England to explore the current practices of caseload allocation within the District Nursing service in order to improve the basis on which the commissioning of the service can be planned and to understand more fully how the demand for the service might be forecast in response to changing demographics of the population.

The QNI consulted representatives from across the District Nursing service to scope current practice around patient caseload allocation and the future requirement for systematic workforce planning.

This report confirms the need for a robust system to objectively assess population demands, determine the size of the workforce required to meet demand in a given locality, and deploy the available workforce efficiently to ensure quality services and focus on the needs of patients.

All the contributors to this report expressed the need for access to new methods to help inform service planners and commissioners.

The findings from this study support the view that more systematic service planning is required. This includes increased access to operational scheduling tools as well as more strategic, robust and flexible workforce planning methods.

A review of the literature specific to District Nursing found that future approaches will benefit by embracing robust new technology, ensuring automated data entry, analysis and reporting. Constant re-iteration will ensure that design and content remain relevant. This will ensure that District Nursing services can utilise and refine the wealth of data at its disposal, to help inform management decisions.

Recent social and economic trends have placed increasing demands on District Nursing services, increasing caseloads, workforce pressures, and associated risks. It is imperative that commissioners and service providers have the right tools to enable them to understand and minimise risks associated with workforce shortfall and the opportunities for service improvement.

Historically, decisions about workforce structure and scheduling have occurred on a decentralised, ad-hoc basis. They rely on the judgment of team leaders, and are often derived from available budgets, historic practice or overly simplistic and standardised caseload sizes.

Notwithstanding new technology and systems, the majority of providers still work on a non-systematic basis. Decision making remains decentralised, not supported by robust data, and often ignores the complexity associated with local factors such as deprivation, number of care homes and geographical spread of patients.

The literature identified that there was a lack of strategic workforce forecasting to predict future demand based on the underlying needs of the population.

This report makes two key recommendations:

Recommendation 1

To develop a District Nurse Strategic Workforce Planning Tool

This would collate data over a year or number of years ensuring that future demand is aligned with available workforce and budgets. This would help determine the future strategy:

- determining the boundaries and caseload size of each locality

- the size and skill mix of the workforce in each locality
- workforce roles (including clinical and non clinical responsibilities)
- service offer – which services should be provided and for which care pathways
- service specifications – tasks involved, intensity, venue setting and location, workforce needed

Benefits:

Developing a District Nurse Strategic Planning Tool will:

1. **for commissioners:**
   - increase transparency
   - assist service contract discussions
   - improve reporting
   - enable contribution to strategies supporting future service offer and workforce requirements
   - renew focus on outcomes
   - enable performance comparisons across organisations

2. **for service providers:**
   - inform strategic service development and decision making around service structure, service offer and future workforce requirements
   - facilitate comparison of baseline and benchmarking data with other services
   - share ideas and innovation

Recommendation 2

To create a locally tailored operational scheduling tool

This would capture and assign work to practitioners, based around patient need and practitioner availability,

It would ensure appropriate prioritisation, taking account the skills of the practitioner.

It would increase workforce efficiency and reduce administration time.

This operational tool would be refreshed frequently and used for daily and weekly caseload management, operating within the constraints of the existing workforce and service offer.

It would facilitate learning and sharing of best practice.

The two tools should be compatible with each other.

1. Introduction

1.1 Background

Workforce planning and caseload allocation refers to the process by which service providers determine the patient need in a locality, the number and skill mix of the workforce needed to deliver specified services to those patients, and then allocate practitioners to individual patients.

This involves two separate levels of planning – strategic planning to determine the workforce required, and the operational planning of patient scheduling, making best use of resources whilst adhering to established strategies.

Planning at each of these levels may occur either systematically or using more informal approaches, relying on the experience of managers. Historically the latter approach has been more common. However given recent trends and new pressures facing the District Nursing services, and better access to technology, there is a unique opportunity to introduce more systematic planning in District Nursing.

Recent trends that impact on the services include:

- The demand for nursing care at home is growing, leading to increased caseloads
- An aging population with more complex needs
- An increased prevalence of complex long term health conditions
- Pressures in secondary care leading to more people being discharged from hospital earlier and with more advanced medical conditions
- Advances in healthcare techniques and technology allowing more complex care to be delivered at home
- A decrease in the number of qualified District Nurses and community specialists

As part of the Chief Nursing Officer for England's 'Compassion in Practice' initiative, the QNI was commissioned by NHS England to explore the current practices of caseload allocation within the District Nursing service in order to improve the basis on which the commissioning of the service can be planned and also to understand more fully how the demand for the service might be forecast in response to changing demographics of the population.

Specifically, the QNI were commissioned to:

1. Gather, review and analyse the best evidence of current workforce planning and caseload analysis tools that will support commissioners to commission community nursing;

2. Simultaneously identify innovative models of workforce and caseload demand that could be further field tested;

3. Collate all evidence, findings and analysis and test with key stakeholders through a series of workshops to define and agree a valid workforce planning and caseload allocation tool that could then be used by commissioners with providers.

1.2 Consultation Exercise

This consultation has been undertaken to understand and address service planning challenges, both strategic and operational, and to determine the system requirements as expressed by those who deliver services.

The consultation exercise focused on the need for a systematic framework for workforce planning and caseload allocation for District Nursing, trying to identify current best practice. The recommendations of this report are based on these findings, and look towards the development of a new national framework, to improve service planning and reporting.

System requirements were determined based on work undertaken previously by The Queen's Nursing Institute (QNI), including surveys and feedback from service providers. This identified an apparent lack of systematic planning within District Nursing workforces.

It is recognised that service providers operate in unique environments, with local strategies reflecting underlying population needs, demography, geography, commissioning structures, funding levels, information systems, available technology and workforce.

It is imperative that the development of a new system should reflect consultation with service providers across the country, ensuring that future developments reflect the diversity of need while addressing key issues impacting on the service.

To ensure a broad understanding of existing issues and future requirements, it was decided that key issues to be covered during the consultation would include:

- Existing processes guiding decision making around workforce planning and caseload allocation
- Concerns, risks and perceived inadequacies in the current system
- Recent initiatives or methods being applied and their impact / outcomes
- What a good planning system would look like
- Specific ideas for improvement, including ideas from other areas of the health system or other countries
- How we can leverage the power of existing systems, intelligence and technology

1.3 Outcomes

The consultation exercise identified:

- Common themes from the responses around existing planning systems
- Requirements for systematic workforce planning and caseload allocation tools
- Existing effective practice in this area, and the outcomes being achieved from such tools and processes.

The project drew on the experience of people involved from all areas of the service, to identify common issues and suggestions for improving planning and caseload allocation. This also identified the positive results of existing planning systems.

The recommendations in this report outline a realistic plan to develop a national service planning framework: accessible tools that can be configured and implemented to reflect service providers' requirements, owned and used by the providers.

If implemented, these recommendations will address the findings of the consultation, giving consideration to the integration of existing effective systems into new planning tools.

1.4 Work performed

The consultation involved the following activities:

- Holding three stakeholder workshops, to allow issues to be discussed and provide a common understanding of the issues affecting providers and commissioners.

- Meetings with agreed external parties and providers to review the application of existing innovation and capabilities to improve planning in District Nursing.

- Collation of results and link to the key findings from the “QNI 2020 Vision” survey, highlighting key developments, risks, concerns and planning processes relating to workforce planning and caseload allocation.

- Circulation of an additional information request to selected respondees from the QNI 2020 survey to extract further information in areas of interest to this project.

- Review of other sources of information or research that arose or were recommended by the advisory group.

- The project has also been informed by the overall findings of the Literature Review, which presents a review of the evidence supporting workforce planning and ways in which patients are currently allocated within the District Nursing service

1.5 Timescale

The consultation commenced in September 2013 and analysis of the results finished in December 2013. Editing and review took place between January and April 2014.

2. Methodology

2.1 Advisory group

An advisory group was formed to oversee and inform the objectives and structure of the consultation. The selection of the group ensured a broad spectrum of skills, experience and perspectives.

Two formal advisory group meetings were held during the project. At the first meeting in September this focused on agreeing overall project objectives and processes, as well as specific ideas and areas of focus. The group was also kept updated by email regarding the project, and several of the group contributed to ongoing issues where invited to do so.

The advisory group will also receive this final report and be given an opportunity to feed back on the recommendations and future developments.

Table 2.1 - Members of the advisory group

Name	Job Title/Location
Professor Ros Bryar	Advisory group chair, QNI Fellow
Crystal Oldman	Chief Executive, QNI
Anne Pearson	Practice Development Manager, QNI
Wendy Nicholson	Professional Officer – School and Community Nursing, DH
Carole Roberson QN	Specialist Practitioner Facilitator for District Nursing, Worcestershire
Ben Bowers QN	Community Cancer Nurse Specialist, Cambridge
Sue Elvin	DN consultant, Camden London
Debbie Brown	Head of Quality, Kent Community Health NHS Trust
Maya Desai	Policy Advisor, QNI
Michael McGechie	Project Manager, QNI
Dr Susan Horrocks	Senior Lecturer, University of the West of England
John Clark	Director of Education & Quality Health Education Thames Valley
Tina Roebuck	Clinical Lead District Nursing, Stockport

2.2 Regional Focus Groups

Three stakeholder workshops were organised and run by QNI specifically for this project as follows:

Table 2.2 – Workshop information

Location	Date	Attendees
Birmingham	8 October	27
London	17 October	25
Liverpool	12 November	30

The venues were spread geographically to reduce travel time and maximise availability of attendees wishing to be involved.

The sessions were organised and facilitated by the QNI. Invitations to participate in the workshops were sent by email to community nurses from the QNI database of around 8000 community nurses.

Numbers at the focus groups were restricted in order to ensure an individual level of participation and contribution to the aims of the project. 126 people expressed an interest in attending and in total 92 people attended one of the three workshops. All three workshops were oversubscribed.

Attendees represented a diversity of localities, positions (district nurse managers, and frontline district nurses) and backgrounds and came predominantly from service providers but also from clinical commissioning groups. This ensured a range of perspectives to enrich the discussion.

A full list of positions attending the workshops is provided in Appendix 3.

2.2.1 Programme

The number of attendees, agenda, format and time available were similar across all three workshops. A sample agenda (from the first workshop in Birmingham) is included in Appendix one. Following a review, it was agreed this worked effectively and a similar structure was employed for the other two workshops.

The sessions began with introductions and the background to the project. The remainder of the sessions focused on group activities and discussion. These were based around five topics, selected by QNI. These were selected to focus discussion on areas considered most relevant and to ensure coverage of a broad range of issues to reflect the different aspects and interpretations of service and workforce planning, both operational and strategic.

These topics and underlying considerations are presented in the table below.

Table 2.3 – Workshop topics

1. Patient management	2. Assigning work	3. Capturing information	4. Team structure	5. Reporting / Improving performance
How are patients' needs identified and planned for? • Referral in • Assessment • Care pathways • Outcomes • Severity / complexity • Discharge / referral	How are caseloads measured and assigned? • Activities • Staff • Responsibilities • Prioritisation • Staff shortfalls • Controls • Non clinical responsibilities • Phasing of non delivery activities	How do we record info about service performance? • Time • Activities • Outcomes • Additional needs • Patient Management systems • Use of mobile technology	Defining caseload and workforce requirements across localities • Team size • Skill mix • Caseloads • Forecasting future needs • Demographics / local profiling	Producing timely data to help: • Assess performance • Improve decision making • Identify opportunities • Drive improvement • Validate planning assumptions

2.2.2 Structure

Attendees were divided into five working groups at each event, and were mixed to ensure a spread of providers and backgrounds within each area. The working groups were focused on one of the five topics identified. Guidance was given to each group providing background and ideas regarding this topic.

The focus of the workshop was then split into two sections:

1. Current position: 'How are activities in the assigned topic currently performed in your area?'
2. Future requirements: 'What are the 'must haves' in a service planning tool from a:
    a) DN perspective?
    b) Manager's perspective?
    c) Commissioner's perspective?'

Each section involved group work, with each group asked to discuss their topic, collecting their thoughts on a flip chart, and presenting this at the end of each section. This prompted discussion with the overall group. It also highlighted existing good practice and raised new ideas in each area.

The content of the group flip charts and discussions were recorded, with key issues from across the workshops collated by the QNI.

2.2.3 Methodological limitations

It should be noted that those who volunteered to attend a workshop or who contributed to the survey were, in effect, a self-selecting group of practitioners who are interested and involved in this agenda.

Participation in the workshops was in part determined by the geographical location of the events and stakeholder availability.

It is felt that attendees enjoyed a positive workshop experience and felt able to participate and contribute freely. Feedback from the attendee post workshop feedback survey following the workshop in Birmingham is included at Appendix 2.

2.3 Evaluation of existing District Nursing planning tools

Time during workshops was spent assessing existing methods within District Nursing service providers in England – customised software, Excel models and processes being used to systematically improve decisions around workforce and caseloads.

This analysis of existing methods had the following objectives:

- To identify effective methods already being applied in England, how they have been developed, and where they are being used.
- To establish how the methods work and the intended or actual outcomes being realised.
- To assess compatibility with project objectives, i.e. workforce planning and caseload allocation, and factors governing potential integration and access, for instance new technology or intellectual property.

- Developing insight from current methods and understanding how they might inform future development of a new framework.

Most methods observed focussed on operational planning: scheduling, caseload allocation, service improvement or retrospective analysis of performance data aimed at improving efficiency and harmonising service delivery in line with specification.

Providers have generally implemented bespoke tools developed around local requirements. Several methods that were analysed have potential for wider adaptation; however there were few examples of joint rollouts or common tools.

As well as combining stakeholder requirements for improved planning, the consultation addressed existing good practice being used by District Nursing service providers to inform workforce and patient allocation.

2.4 Site Visits and Remote Scrutiny

Existing tools and processes were then identified and assessed for compatibility with the objectives of the project, to determine which should be targeted for site visits.

This occurred by various means, including existing knowledge within the QNI, referrals from the advisory group, the online surveys and the regional workshops. A meeting was also held at the Department of Health prior to the official commencement of the project and attended by the QNI, which involved the demonstration of various methods and approaches.

Once the areas of focus were determined, meetings and discussions were arranged with key stakeholders involved in development or having significant experience in using them. Due to either availability or timing issues, visits were not possible for each site; however information was requested to ensure that as much as possible about each method could be learnt.

The number of methods identified grew as the consultation work progressed, and due to time limitations involved in developing the report, it was not possible to complete an examination of all methods. This is not a reflection of the perceived effectiveness of these methods, rather a reflection of the following criteria:

- Relevance to the project
- Level of utilisation
- Recognition and perception by providers
- Access to appropriate advocates or guidance material / research
- Uniqueness of their function (for instance many tools identified are used to perform patient scheduling rather than workforce planning, and we have not been able to evaluate all of these)

The existing workforce planning systems analysed as part of this project are summarised below:

Methodology	Person / Position	Organisation	Format of consultation
Domiciliary care system in the Community "DominiC" (also referred to as the Stockport Electronic Master Patient Index (eMPI) Allocation System	Kay Durrant Head of Service, District Nursing	Stockport NHS Foundation Trust	Site visit

Community Nursing Workload Project	Dr Deirdre Kelley-Patterson Head of the Centre for the Study of Policy and Practice in Health and Social Care Senior Lecturer	Centre for the Study of Policy and Practice in Health and Social Care, University of West London	Site visit
Care Dependency Model	Kirsty Thurlby Lead for Community Nursing and Long Term Conditions	Virgin Care Limited	Phone conversation
Episodes of Care		County Durham and Darlington NHS Foundation Trust	Desktop review of material
Workforce Planning Toolkit	Lisa Navin Strategic Workforce Transformation Lead / Transformation Team	Staffordshire & Stoke-on-Trent Partnership NHS Trust	Desktop review of material
Electronic Referral and Caseload Scheduling for District Nursing		South Tyneside NHS Foundation Trust	Desktop review of material
Community Workload Assessment Tool	May Grafen Workload Programme Advisor	Nursing and Midwifery Workload and Workforce Planning Programme, Scotland	Attended presentation, desktop review of material
General discussion regarding alternative methods	Anne Cooper Clinical Informatics Advisor (Nursing)	NHS England	Site visit

The study did not include overseas methods as it was desired that tool outcomes could be evidenced in a national setting. Such methods do however form part of the Literature Review.

2.5 Online survey

The QNI developed an online survey which was designed to elicit information specific to this project.

The survey focused on selected issues affecting workforce planning and caseload allocation. The survey was sent to 421 individuals, yielding 150 responses.

The questions in the workforce planning survey were developed by the QNI with assistance from the advisory group. This focused on how workforce planning is currently being performed, broadly falling into the following categories:

- Quantifying demand and workforce requirements
- Determining team size and mix
- Classifying and forecasting patients, care plans and activities

- Collecting and accessing patient information
- Existence and impact of service specifications
- Recording and reporting outcomes and performance data
- Requirements of a future service planning tool
- Additional information

The survey results have been collated and the results summarised in the next section. A full set of results and comments by respondees is included in Appendix 14

2.6 Literature review

A critical review of the literature relating to workforce planning and patient allocation practices in District Nursing services was undertaken with the aim of analysing the research. Filtering the results for the most relevant papers resulted in 14 papers that either described approaches to workforce planning or ways in which patient allocation decisions were made in District Nursing services.

The literature review is included in Appendix 6 and has been published as a separate document, following considerable interest from service providers seeking to understand the current research in this area.

3. Key findings

3.1 Advisory group

The advisory group was selected to ensure a broad representation from front line clinician, manager, commissioner and educator perspectives. The advisory group assisted in determining project scope, raising key issues and developing awareness of existing methodologies.

3.2 Regional workshops

Common issues have been summarised from the three regional workshops, presented in line with the topics covered in the workshop structure (see table 2.3).

3.2.1 Current practice

Discussion of existing processes highlighted the diversity of planning processes. Considerable insight into existing shortcomings and good practice was provided, and discussion remained positive, focused and constructive covering planning, existing areas of concern and impact of recent changes.

Table 3.1 – Workshop feedback on current practice

1. Patient management	• Patients are managed on a case by case basis and generally not assigned to a standard condition or care pathway • Referrals often still manual, i.e. GP fax/paper • Generally not assessing complexity to weight time / pathway • Move towards central referral /access/triage • Not focusing on outcomes / discharge • Often non-systematic methods used to manage patient care • Not forecasting patient numbers
2. Assigning work	• Some have scheduling software / spreadsheets to allocate work "E-rostering" • But generally assigned on less systematic basis, i.e. manual system, using judgement /intuition rather than following a system or using performance data • Several using standardised units e.g. 15 mins • Deployment of bank / frailty / virtual / integrated / specialist teams • Issues over co-location for example with GPs • Booking, planning & prioritising unplanned visits • Inconsistency re care homes
3. Capturing information	• Some using local system to capture delivery / timesheets (Rio, System 1) • Often do not "fit" or not correctly configured • Various means of coding activities but no national system • Often performed in tandem with manual system • Varied access to technology and medical records • Lack of emphasis on recording outcomes

4. Team structure	• Lack of formal tools to arrive at caseload / team structure • Team structure based on standard caseloads or subjective decisions • Geographic factors often not taken into account e.g. travel • No seasonal change to staffing • Often not linked directly to local complexity / demographics • Not factoring in role of skill mix / less experienced staff
5. Reporting / Improving performance	• Different work patterns across teams • Reporting reflects inconsistent, non-standardised or incomplete data • Some reports focus on contacts and not time, quality, complexity • Don't necessarily allow assessment of team performance

3.2.2 Future requirements – What are the 'must haves' in a service planning tool?

We asked attendees to focus on requirements of future service planning from three perspectives: (1) the District Nurse (2) the team leader and (3) the commissioner. There was enthusiasm regarding the development of a new systematic approach, and openness in sharing ideas and suggestions. The link between better quality information, better reporting and better planning was recognised by all.

Table 3.2 – Workshop feedback on future requirements

1. Patient management	• Improve referral and discharge – communications with GPs and hospital sector • Must be patient focused (outcomes, quality, patient journey) not overly task focused • Access to standardised national framework for care plans • Better access to national best practice i.e. for care pathways • Baseline approach to care pathways and activities • Weighting to reflect complexity
2. Assigning work	• Systematic approach is required, providing support for more objective allocations • Take into account non face to face activity / staff workloads • Right nurse right skills - skills, competencies, patient relationship • Match complexity with staff • Innovative practice increasing care / productivity / efficiency • Integration of mobile technology • Correct allocation of time to ensure quality
3. Capturing information	• One universal tool to avoid duplication (not "another form") • Investment in mobile technology, live tool, accessing live records • Aligned to District Nursing requirements • Improved capturing of outcomes • Staff need to understand why data is required / how it is used and see it coming back • Standard codes / activities / interpretation • Dependency index • Simplicity of use and understanding • Efficient

4. Team structure	• Apply standardised service delivery with existing workforce availability to assess existing capacity • Evidence based – apply real data / profiles • Inform commissioning • Reflect complexity, demographics, deprivation • Reflect workforce non clinical responsibilities • Reflect urban / rural issues i.e. travel, density • Ability to forecast need over a longer period • Skills audits to ensure compliance
5. Reporting / Improving performance	• Robust, validated data • Report on actual vs. predicted to help validate / assess performance • Benchmarking locally and nationally • Risk alerts where violating predefined quality levels • Instant view of capacity across all teams • A dashboard addressing key areas e.g. outcomes, efficiency, capacity, risk, trends • National benchmarking / criteria / parameters • Compatibility with commissioner requirements

3.2.3 Summary of future requirements

The requirements have been summarised in the table below, classifying them into one of four areas:

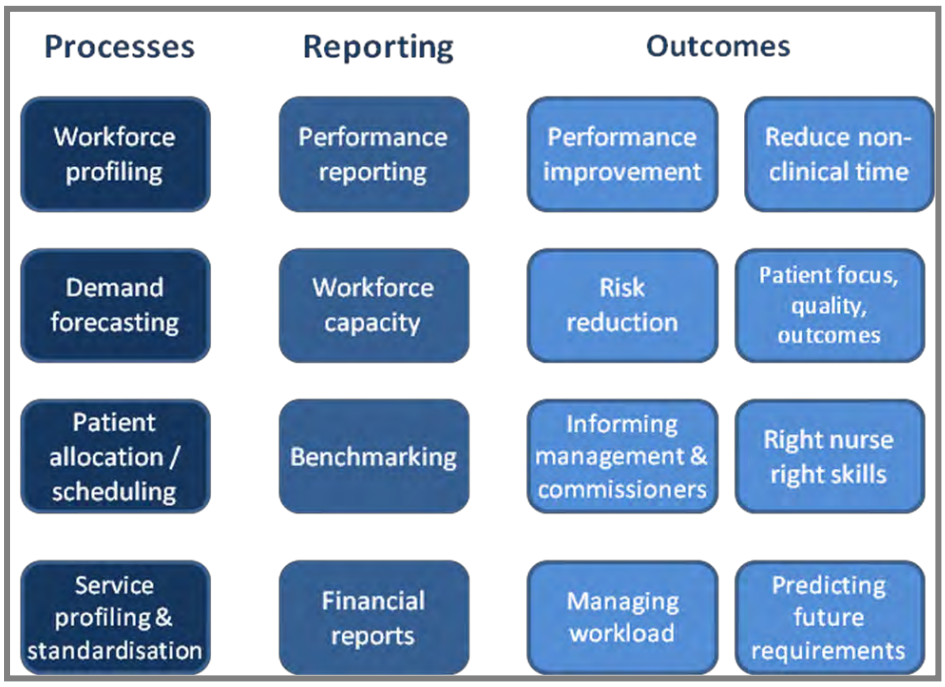
a) **Technology** – hardware, software (e.g. Patient Management system), automation, networks, mobile working, partner integration. Technology may be requisite to or facilitate processes. As below, changes in these areas are overseen locally and not considered within the scope of this project.

b) **Processes** – adopting new methods to process performance data and assumptions about the future to allow for more objective decision making. This also includes standardising classification of information regarding patients, acuity/severity, complexity, conditions, care plans, activities and outcomes. Processes enable new types of reporting.

c) **Reporting** – delivering improved information to inform decision making and assessment of performance. Better reporting may assist in identifying areas of improvement and lead to favourable outcomes. Reporting also relies on robust and complete data.

d) **Outcomes** – the results or objectives of improved planning processes and reporting. These may be a result of one of several of the above, i.e. improved technology might ensure better data which may use a robust methodology to create insightful reports; this may then lead to identification of and addressing inefficient practice, potential opportunities or areas of risk / non-compliance.

Table 3.3 – Summary of requirements



These requirements are used as the basis for the recommendations, and take into consideration findings of the next section, which addresses existing methods and processes already operating within District Nursing.

Note on Technology

Much of the feedback received related to technology (hardware, networks) and performance management systems such as Rio and System One. There was variation in levels of integration with healthcare delivery partners, in particular access to GP information and GP patient records. These issues are likely to be based around local considerations such as funding, stakeholder and commissioner requirements and professional agreement to share patient records. These wider IT compatibility issues are not considered to be changeable in the short term and are outside the scope of this project.

3.3 Evaluation of existing District Nursing planning tools

The evaluation focused on specific applied methods for workforce planning and caseload development currently being used by providers in the United Kingdom.

The summaries for each of the methods assessed are included in Appendix 4 (together with various supporting material in subsequent appendices). These provide background to each method, how they are being used, and the impact they are having in their provider services.

Much development and implementation activity has occurred recently, reflecting adoption of more objective, automated approaches, and increased adoption of new technology.

3.3.1 Operational methods

Most tools are operational in that they are used to improve performance within the existing workforce. These would be broadly split into the following functions:

- **Scheduling methods** - for allocating workloads efficiently and effectively (Stockport)
- **Performance improvement methods** – for reducing administration, harmonising service delivery and reducing risk (South Tyneside)
- **Retrospective validation and assurance methods** – for analysing performance data to identify variances with comparator data and providing improved reporting to inform decision making (UWL, Virgin Care)
- **Care standardisation** - harmonising and improving delivery by standardising contacts (interventions, timings – several tools), care pathways (Episodes of Care – Durham & Darlington), and weighting activities for user complexity

Some of the tools assessed performed all of these functions (e.g. Stockport, South Tyneside).

3.3.2 Strategic methods

Fewer existing tools focused on longer term strategic workforce planning. This requires the prediction of demand (population needs) rather than managing the supply (current workforce). It also forces consideration of the future service offer, which drives the level of support required to address the current and predicted future needs of local populations.

This can then be linked to supply (i.e. size and skill mix of workforce), to assess workforce implications. Workforce requirements will therefore be a product of local demand, service offer and workforce availability (reflecting considerations such as non clinical tasks, travel and leave).

3.3.4 Shared development

As concluded in the literature review, many of the tools used across the country have been locally commissioned, developed and implemented, using local service intelligence and pilots. There are fewer examples of providers working together on joint projects. This no doubt adds complications to commissioning and agreeing parameters.

However from a national standpoint, bespoke development results in lower value for money – it is less efficient, prevents innovation being shared and restricts universal data sharing opportunities hindering benchmarking and external validation.

3.3.5 Linking back to requirements

Table 3.4 (below) takes the key requirements established during the consultation with the service, and identifies the areas least well served by the methods considered above. These areas are highlighted in red and discussed further below.

Workforce profiling – several patient allocation, scheduling and acuity tools define the delivery role in accordance with a suitable practitioner (“right nurse, right skills”). However few of the methods address the productivity / non-clinical and travelling time aspects of the workforce in a dynamic way.

Demand forecasting – many tools focus on the existing workforce (supply) and work with this to maximise efficiency and performance, as opposed to focusing on the services required by the local population (demand). Demand is determined by adopting a forward vision of the service specifications and the needs of the local population.

Workforce capacity – there was limited analysis addressing the capacity levels of the existing workforce and highlighting workforce shortfalls. Not understanding capacity may lead to imbalanced workforces, assigning too much work, resulting in missed or late

sessions, or not having enough time to deliver services in line with specification. This may also miss seasonal fluctuations.

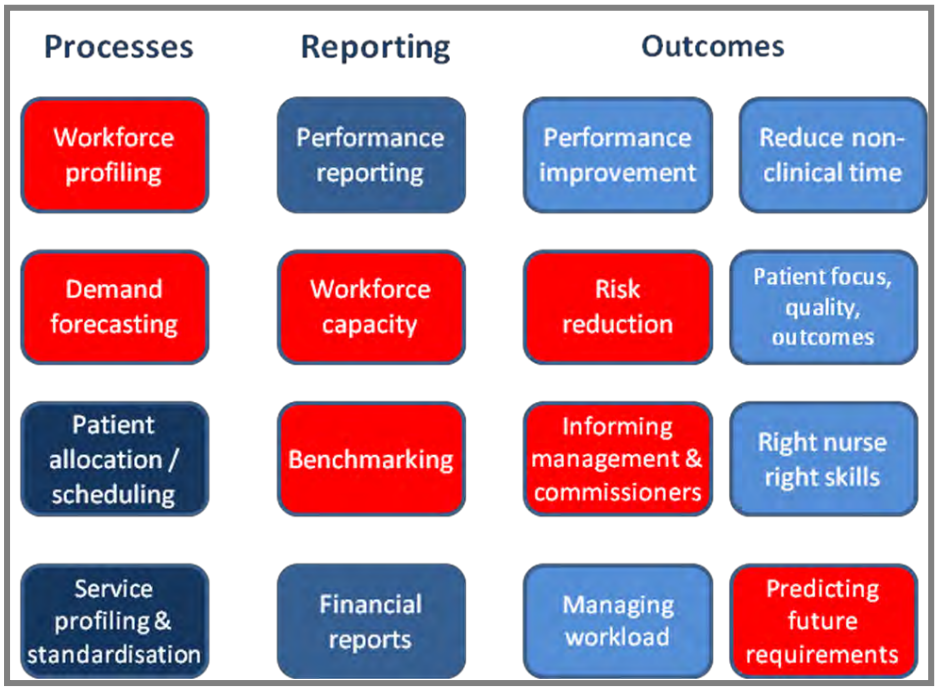
Benchmarking – due to a lack of commonality between tools there is limited comparison, benchmarking and external validation across the country. The exception is the Scotland / UWL analysis methods which are being used to compare data across multiple providers.

Risk reduction – associated with workforce shortfall, lack of focus on quality and outcomes. Skills shortfalls may be managed to an extent using patient allocation / scheduling tools. However this is often focused on current services and workforce. An example of longer term risks that might not be identified in this way is the impact of services which remain undelivered or patient referrals denied due to variable workforce availability.

Informing management and commissioners – there is often a lack of systematic, objective information to communicate key risks and outcomes to management and commissioners. This could include for instance a workforce shortfall projected over the next 1, 2 or 5 years.

Predicting future requirements – we found that very few service providers are forecasting future requirements, and operational tools tend to look at immediate requirements. Forecasting requires incorporating assumptions around future population requirements and changing demands on the service.

Table 3.4 – Key requirements



3.4 Online Survey

The online survey received a large number of responses and gave a detailed account of existing planning structures.

Much of this feedback served to reaffirm themes encountered during the workshops but the survey data provided a clear confirmation of several of these issues.

For full survey results see Appendix 14 - survey responses. Some examples are included below for illustrative purposes:

- There is a lack of formal planning or forecasting in predicting demand. Team size is determined either by past levels, available budget or standardised caseload measures

- There is a lack of formal planning around the role of skill mix, or lack of adherence to accepted staffing levels

  "A standard recommendation is used by the trust of 70% trained staff + 30% Health Care Assistants but some teams are working with 40%- 45% HCA"

- There is a lack of formal tools leading to a perception of imbalanced staff workload and of pressure on staff to deliver outcomes

  "The demands on the community nursing service has increased due to national policy and an ageing population but the size of the workforce has never been increased to accommodate these demands. Stress has increased among the teams resulting in increased sickness and nurses leaving the service."

- Patients are allocated to practitioners based on the judgement of team leaders, rather than a systematic method of allocation, without a formal care plan

  Patient allocated *"subjectively, by clinician allocating, e.g. nurse in charge, or previous visit nurse"*

- Time slots for service delivery are often not measured or predicted, or time allocated is not accurate, or visit time may depend on how busy practitioners are

  "Visits are allocated and prioritised, if unable to complete visits due to capacity issues, visits have to be cancelled and rescheduled for following day which can have a knock on effect to capacity issues and staff availability for the following day."

- There remains a pre-occupation with manual or end of day data input, which implies that technology is not being taken advantage of fully

  "Both written notes in home and then RIO notes on return to office"

- Most either have difficulty accessing GP records electronically or still use faxes or other manual methods

  "We have to request information via the GP receptionists who do not think DN requests are of any importance and sometimes have to wait days for the data asked for"

- There is a lack of adherence to formal service specifications

  "Depends on the staff and if anyone complains"

- Most are not capturing visit data around outcomes, diagnosis, or acuity / severity and complexity

  “Most of this information is available to collect but little evidence it is currently used”

- Several different tools are being used, most developed locally or by neighbouring authorities, indicating a lack of sharing, and missed opportunities in sharing best practice and creating a common framework.

4. Discussion – method classification

This section seeks to clarify the objectives and functions of different planning methodologies used to inform decisions around workforce and caseload allocation. This will help to distinguish the types of methods addressed in the previous section, and align with the approach adopted in the recommendations.

The needs expressed during the consultation reflect that stakeholders see the benefit in both operational and strategic solutions to workforce planning and caseload management. They appreciate the requirement to link workforce to demand; they also see the benefit in using a tool which allocates patients to the workforce efficiently and effectively.

Table 4.1 – method classifications

4.1 Operational service planning

Scheduling tools allocate patient visits to the available workforce to facilitate resource allocation decisions. Several examples were included in our method assessments (Stockport, South Tyneside, Virgin Care) and many others excluded due to time limitations.

Scheduling tools assist operations by matching current patient caseloads and available workforce in the current day or week. They are often linked directly with health databases to access patient records, and performance management systems to allow staff to input clinical and non-clinical time. This may deliver powerful new reporting features and the ability to validate in-built assumptions around activity times etc.

Outcomes from successful application of these tools include:

- Increased efficiency – optimum use of staff time
- Reduced administration time
- Collection of more comprehensive and better quality patient data

- Risk management (ensuring visits are completed on time, in line with specification, and by the right grade of staff)
- Improved patient / outcomes focus
- Performance improvement – identifying and addressing variations, harmonising service delivery with specification

Several scheduling tools use bespoke software, in many cases commissioned from third party developers.

4.2 Strategic service planning

This refers to methods that adopt a wider and longer term view of demand and supply when compared with operational solutions. It takes a "bottom-up" view of demand, bases future service requirements on the changing needs of the local population; it is not constrained by existing levels of services, budget or workforce. This enables the provider to build strategy around future population demographics, service offer and workforce roles.

Strategic planning should inform and prompt the following types of decisions:

- Changes to the service programme (care pathways and services offered)
- Changes to the service specifications (how care pathways and services are performed)
- Changes to workforce roles (clinical and clinical support roles)
- Additional workforce requirements by locality
- Rebalancing the locality structure

This allows the service provider to predict future demand based on the requirements of the local population at the service level, and sensitise team and practitioner caseloads in line with local demographics.

Strategic tools require predictions about the future in terms of population, public health, referrals/presentations, service delivery and workforce capacity. These should be robust and attainable, and where possible informed by performance data.

We found fewer examples of this based on the work performed. Scheduling tools may balance workforce availability with delivery requirements (for a day or a week), however this is generally not linked to overall care pathways, outcomes and service strategies.

4.3 Retrospective validation and assurance

Several planning systems analyse data collected from service delivery, and use this information to either internally or externally validate results, identifying variations and improvement opportunities. These can inform opportunity identification, performance improvements, caseload assessment and sensitisation.

These may be standalone (UWL, Scotland, Virgin Care), or one of the functions included in a scheduling tool (Stockport, North Tyneside). Data is usually collected at the workforce level via staff timesheets or similar. This enables analysis of staff time, number, type and length of visits, clinical support activity, travel time etc, allowing comparison across localities or providers.

Some variations may be noted, for instance due to caseload complexity or geographic factors. Unexplained variations can then be focused on and discussed, to understand differences and drive performance improvement.

These methods collect data around current performance and variations in service delivery. They offer some “top-down” planning potential, extrapolating averages and trends resulting from the analysis. This effectively establishes a baseline for service delivery, capturing information around existing activity to identify variations. This may also provide a sense check for predictions of future service delivery, e.g. achievability of delivery times.

These systems do not usually capture patient conditions, severity, care pathways, or outcomes to inform future demand. This may be due to the method of data capture or the subjective nature of these classifications. These methods are focused on retrospective analysis, and do not forecast future planned and anticipated changes or facilitate strategic development as outlined above.

5. Conclusions

This consultation has provided a wide cross section of opinions and responses from various organisations involved in providing or commissioning services.

Those organisations want better access to methods to produce objective, robust information to help plan workload. There has been very little resistance to the idea of new methods, despite the potential impact on existing decision making processes.

The project reviewed several caseload allocation methods currently implemented by service providers. Most of these have been developed locally and driven by local requirements. Most are operational in nature, focusing on scheduling, caseload allocation or validation / assurance of performance data.

The findings of this consultation support the view that a new national planning tool is required to assist providers to inform decision making around District Nurse workforce planning. The recommendations outline the steps required to achieve this.

Any new framework must be accessible and available to all service providers. To ensure this, the recommendations we have provided operate within the following context. A new system should:

- Not depend on existing hardware or software / systems
- Be easy to access, implement and maintain
- Be standardised but flexible – able to reflect local requirements
- Be iterative - improved over time to reflect new ideas and changes, and updated via a local folder
- Facilitate comparison – able to be compared and validated against other providers
- Be supported – if required external support should be available to assist with implementation, ongoing maintenance and resolving issues
- Be owned and managed by the service providers, reflecting local intelligence and strategies

It is acknowledged that any new system will never suit everyone's requirements. This reflects the variation in existing tools and systems, data quality, local strategies, current challenges impacting the service, and management outlook.

However the intention is to provide a methodology which is sufficiently flexible to accommodate different requirements and able to develop over time, providing a valuable and open resource to assist providers in improving their services, inform strategy and provide robust reporting for management and commissioners.

The findings and conclusions of this work will support commissioners and service providers to understand the range of ways in which District Nursing services are allocated on a daily basis to the population they serve and the potential use of the data collected during this process, including measurement of the volume of activity against agreed local tariffs for specific interventions and the consequent patient outcomes.

The report has also explored the challenges that exist in accurately predicting the future demand for the District Nursing service from the caseload scheduling/allocation data and demonstrated that further work on this area is needed in order to support commissioners with a robust workforce planning tool which adopts a more strategic approach.

Many service providers have indicated that they are keen to see the report to inform the planning, development and implementation of caseload allocation tools within their own areas.

6. Proposed Development

The following section describes the QNI's proposals for the development of a workforce planning tool which would build on the findings and conclusions of the work reported on within this paper.

There are two distinct priorities for the QNI's proposals for the next phase of the project:

1. Strategic workforce planning tool

A tool facilitating comparison across providers should be developed. This will enable sharing of best practice, identify differences (and opportunities) across services and provide robust, evidence based reporting to inform commissioners about local workforce requirements.

It should be noted that the key prerequisite will be the collection and reporting of robust performance data. Quality activity data ensures that planning can be compared to existing performance. These initiatives are specific to the providers and require local action.

A bespoke solution is required due to the lack of available tools in this area. The tool will be developed within the following parameters:

- Reflect a standardised approach to service profiling to facilitate uniformity and comparison of data, whilst providing sufficient flexibility to reflect local differences
- Align to established existing activity datasets
- Draw on existing provider datasets to provide an initial baseline, for activity data, staff clinical support activity, patient referrals, intensity / frequency of visits
- Enable providers to develop a future local service programme, reflecting service delivery and intensity across each care pathway
- Profile local population, predicting health needs, referrals and activities required to deliver the required service programme
- Profile the local workforce over the longer term, predicting availability and capacity to meet demand requirements

This will provide:

- An objective approach to profiling local demand
- Ability to forecast future service requirements
- Workforce planning data
- External validation, providing a national comparator dataset to compare different components of the provider's service
- Define a national standard of DN workforce planning datasets

2. Operational service planning

Several bespoke tools are available and have already been implemented. Providers who do not have access to these but are aware of them, understand the benefits and see these as valuable ways of improving services.

A review to comprehensively assess available methods for their suitability should be undertaken by a specialist. This should result in a "make or buy" decision, evaluating current approaches and software packages to identify one which may best accommodate a national rollout.

This would need to address the following issues:

- Cost
- Performance and functionality
- Intellectual property (rights)
- Information governance - dealing with patient records
- System compatibility (hardware / software)
- Flexibility of configuration (i.e. being able to localise to providers service)
- Process for making changes and improvements (e.g. reporting, bug fixes)
- Intentions of developers / owners to share
- Support and administration

This could also be compared with the likely costs/benefits of developing a new bespoke approach.

Next steps:

The next phase (phase 2) would be required to focus on the development of a District Nursing strategic workforce planning tool. Participating pilot sites would be expected to agree to provide service data to assist data analysis and confirm baselines. A review of available resources and pilot site data would then look to develop a standardised reference set of conditions, care pathways and contacts/activities.

The QNI is positioned well to explore the next phase of the project and several pilot sites (provider organisations) in a range of settings in England have been identified to participate in phase two of this work.

A project bid for phase two was submitted to the Department of Health to undertake this work in 2014/15. This bid may now be passed to Health Education England for consideration as it has a significant relationship with the current HEE work stream focussed on community nurse workforce planning.