

Developing a national district nursing workforce planning framework

Consultation and recommendations

The Queen's Nursing Institute - December 2013

Appendices

Appendices Appendix 1 - Workshop Programme - Birmingham 8 October

10.30	Welcome and Introduction	Anne Pearson
10.40	Background to the work/	Anne Pearson
10.50	Scope of the project	Michael McGechie
11.00	Survey results	Maya Desai
11.10	Current position	
	Group work	
11.45	Feedback	All
12. 10	Lunch	
12.40	What are the 'must haves' .in a service planning tool from :	Group work
	DN perspective	
	Managers perspective	
	Commissioners perspective	
1.25	Feed back	All
1.45	Next steps	Anne Pearson
2.00	Meeting Ends	

Appendix 2 - Workshop feedback (Birmingham)

The following responses were collected and provided after the workshop in Birmingham on the 7^{th} October:

Did you find the workshop relevant and useful?
Yes
Yes very
Yes
yes
Very useful - it is nice to speak to other areas of the country and be assured that the same difficulties occur
very useful
very useful

2. Did you think the workshop was well structured?	
Yes	
Very well structured	
Yes	

3. Did you feel there was adequate time to explore the issues raised? I'm sure discussions could have gone on longer but there was time to explore issues raised We could always do with more time for everything but I feel adequate time was allowed Yes no could really have dibe with maybe an hour or so more. Plenty of time to discuss yes

4. Did you find the instructions for each session were clear?
yes
yes very clear
Yes

yes

5. Is there anything else about the issue of DN workforce
planning that you would like to tell us that you did not feel
was covered in the workshop?
No

No but would like to add that it was invaluable working with nurses and managers from other parts of the country and finding out about how they caseload manage

Nο

I am not sure if there are other strands looking at DN workforce planning and how will these 'marry up' with the QNI work

Be careful not to develop something that is not felxible to geographical needs.

no

no

6. Do you have any comments on the venue used?

Excellent

Very good venue and very central as I travelled by train from Somerset. Good lunch

Good venue, good food

nο

Very good venue, easy to get to

clean, good location, friendly, comfortable

would have liked to have done a session nearer home but the venue was very good

Appendix 3 - Workshop attendee positions

I think the list below gives a very clear idea of the range of expertise of the people attending

- DN Planned Care Manager
- CCG Contract Manager
- CCG Performance Manager
- Strategy & Delivery Manager (commissioning lead)
- Compassion in Care Coordinator
- Nursing Lecturer
- DN student
- DN student
- Service Lead, Adult Team
- Trained DN, locality manager
- Community Nurse Manager
- · Community staff nurse
- CCG Senior Clinical Advisor (Nursing and Quality)
- clinical education lead working for community health services
- HEE Programme Manager, Information Analysis Directorate of Strategy & Planning
- DN student
- Commissioning Lead, Nursing Directorate, NHS England
- DN team leader

Appendix 4 - Existing methodology summaries

Method	Domiciliary care system in the Community "DominiC" or Electronic Master Patient Index (eMPI) Allocation System
Function	Scheduling of patient care activities to workforce
Development /	Stockport – piloted in 2010, part funded by QNI
implementations	Rolled out to 19 community teams
Technology	Bespoke software developed in Stockport, now owned by the trust
How does it work	Controls allocation of visits, which are done automatically at the start of each day around staff availability and can then be manually changed by the team leader
	Each morning practitioners receive visit lists and at the end of the day enter details of visits, times, and book any further unscheduled visits required back in the office
	Provides comprehensive access to medical records
	Standardised number of minutes for each activity based on local data and analysis, these are updated periodically; these were developed s part of a large local data collection exercise / pilot
	Using a national coding structure for activities
	Document library stores policy, best practice, forms and assessments
	Can book repeat visits at specific times
	Activities drive staff responsibilities
	Staff book time, used as timesheet system
	Extensive reporting options
Outcomes	Reducing errors
	Service harmonisation
	Patient needs – prioritisation, continuity of care, more choice of time, time to care
	Increased productivity and efficiency
	Right staff right skills
	Managing staff workloads
Future developments	Rollout of tablets across whole workforce
	Additional customisation of reports
	Develop the document library to ensure completeness
	Information sharing across services
	Centralised referral source for all domiciliary services

Implications for service planning	Benchmarking and external validation
	Software would be configurable to other services
	Patients are not classified or linked to standardised care plans
	Complexity is not measured or used to adjust standard unit times
Potential adaptability	IP owned by local trust – access may be complicated
Additional resources	Appendix 9 – "Domiciliary care system in the Community" presentation slides
	Appendix 10 - Stockport Electronic Master Patient Index (eMPI) Allocation System

Method	Community Nursing Workload Project
Function	Collection and external validation of performance data
Development / implementations	Adapted from an acute nursing tool and NHS National Services Scotland Community Workload tool
	Implemented with several providers in England
Technology	Developed by University of West London with Keith Hurst
	Information management and technology – Scotland's system
	Benchmarking database – Excel and SPSS format
How does it work	Collects and collates activity data via manual/excel input template
	NHS benchmarking database
	Accounts for direct and indirect care, travel
	Face to face and non face to face contacts classified using codes
	Patient complexity scale 1-4
	Analyses and reports on time data to compare, validate and identify differences with national or regional benchmarks
	Includes quality audit on selected indicators which are included in the analysis
	Estimate locality team community staffing establishments using staffing 'multipliers'
	Enables focus on supply side issues including staff roles, travel, sick leave, non clinical etc
Outcomes	Highlighting variations with the national data set
	Reflect on workforce and role of skill mix
	Targeting increased efficiency and effectiveness

Future developments	Expand the provider base and database
	Develop the indicator set and analysis / reporting
	Develop a new Dashboard which would be available to providers as a charged service
Implications for service planning	Can provide detailed data for validation
	Activity codes may be useful
	Information not collected on patient conditions, care plans or outcomes or referral / discharge
	Anonymous so unsure of ability to report performance by team / practitioner
	Unsure about ability to model and forecast demand and adjust results to allow for caseload complexity
Potential adaptability	Potential to discuss future relationship with developers
Additional resources	Appendix 11 - UWL Community Staffing Methods presentation slides
	Appendix 12 - UWL Community Nursing Workload Project analysis

Method	Care Dependency Model
Function	Collection and external validation of caseload / timesheet data
	Patient allocation / scheduling
Development / implementations	Developed and applied in Surrey by Kirsty Thurlby now owned by Virgin Care
	40 teams are using
Technology	Excel
	Input currently manual / end of day but moving to tablets
How does it work	 Retrospective periodic caseload reviews – random retrospective reviews of manual diaries / caseloads
	Workforce review then informs the scheduling tool
	Activities calibrated based on extensive data collection over long period
	Provides an average predictor to validate / inform caseloads and staffing levels
	Predicts complexity and uses to sensitise team caseloads
	The workforce review provides a "capacity widget" which then informs the scheduling tool
	Technologically advanced – mobile working
	Categories of care, dependency scores
Outcomes	Improved discharge rates
	Safer nursing levels

Future developments	Virgin Care want to focus on validating assumptions and expanding the methodology
Implications for service planning	 Activity data could be very useful to assist external validation Work around complexity / caseload sensitisation
Potential adaptability	Developers are interested in discussing future involvement
Additional resources	

Method	Episodes of Care
Function	List of care types addressing a need linked to standard length of time worked on before reviewing whether delivering what is needed.
Development / implementations	Developed in house by Durham and Darlington Community Services
Technology	
How does it work	Used to inform scheduling and classification of clinical activities
	Each episode of care is linked to an appropriate outcome, e.g. "Safe administration of medication"
	List of episodes can develop over time to ensure completeness and alignment with existing delivery strategies
Outcomes	Standardisation of performance data
	Patients / outcomes focus
Future developments	
Implications for service planning	May offer useful starting point for care pathways
Potential adaptability	
Additional resources	Appendix 5 - Episodes of Care (Country Durham and Darlington NHS FT)

Method	Workforce Planning Toolkit
Function	Strategic workforce planning and operational deployment
Development / implementations	Staffordshire & Stoke-on-Trent Partnership NHS Trust
Technology	Excel

How does it work	Bottom up approach
	Enables managers to work through an integrated workforce planning methodology in a systematic way using population/demographic demand, competency frameworks to match demand and a caseload management tool.
	Triangulation of multiple methods to establishing demand, and include business tools to link workforce planning with the Trust's overall strategic direction
	Identifies potential improvements to the current deployment of staff and possibilities for workforce redesign
	Robust competency frameworks developed across the service
Outcomes	Ensures staff are appropriately placed with the right skills, knowledge and competences to deliver the Trust's person-centred model
Future developments	
Implications for service planning	To assess potential adaptability following access to a full demo
Potential adaptability	Further investigation required and discussion with the developers
Additional resources	

Name of method	Community Workload Assessment Tool
Function	
Development / implementations	Pilot: The electronic workload tool was tested (hosted on SHOW website) on a national basis across Scotland during June/July 2011
	Pilot rerun: April 2nd and 11th May 2012. Eight out of the 14 Health Boards participated
	The tool was placed on the SSTS platform May 2012
	National Run November 2012
	Scottish Government has mandated the use of the NMWWPP Workload Tools from April 2013
Technology	Bespoke software

How does it work	Captures the wide ranging and diverse workload of Community Nurses
	Measures the different levels of interventions (level 1-4)
	Captures the volume and intensity of workload
	Better reflects the range of knowledge and skills that are required for community nursing practice
	Triangulation to produce evidence based workforce planning
	Comprises of specific defined categories which captures actual nursing workload :
	- Workload Tool – User Details
	Direct Interventions: face to face and non face to face contacts
	- Clinics
	- Associated Workload
	- Travel
	- Exceptions
	- Daily Working Hours
Outcomes	Inform decision-making on staffing and workforce needs from a workload evidence base
	Plan staffing according to patient need and support community nurses in their negotiations on staffing levels and work plans
	Consistency across Scottish providers
Future developments	Workload tool to inform decisions around workload and staffing needs
	Further development of data quality questionnaire
	Development of a WTE calculator which will provide a WTE staffing need based on workload
Implications for service planning	Similar to the UWL tool – extensive database of activity / workforce data
Potential adaptability	IP / Software considerations
Additional resources	

Name of method	Electronic Referral and Caseload Scheduling for District Nursing
Function	Change project, scheduling of patient care
Development / implementations	South Tyneside NHS FT
Technology	Software (Hydra)

How does it work	Review of processes
	Innovation and adoption of Lean tools e.g. Value Stream Mapping, Process Timings, Waste Wheels
	Real time electronic process, removal of paper based processes
	Multi disciplinary teams
	Outcomes focus
	Scheduling
Outcomes	Reduction in errors
	Reduction in non-clinical and travel time
	Increase in face to face time with patients
	Increase in uptake of training
	Harmonisation of delivery in line with community data set
Future developments	Development of a Hydra app
Implications for service planning	Processes may be adopted by other providers to target similar outcomes
Potential adaptability	Potential for future discussion with developers
Additional resources	Appendix 13 – Promotional material

Appendix 5 - Episodes of Care (Country Durham and Darlington NHS FT)

From Durham and Darlington Community Services Product List:

An episode of care is the standard length of time we will work on a need before reviewing whether we are delivering what is needed. If the need still exists, and if we are being useful, we will normally carry on working with the patient. Many patients end up having a number of episodes of care one after another.

Community Nursing

Category	Product	episode of care	outcome	
Advice and Support [1]	Advice and Support: short term	1 wk	Patient and carer can access appropriate support	
	Advice and Support: intensive	2 mth	Patient and carer receive advice and support	
Assessment [1]	Patient or carer assessment	2 wk	Assessment completed	
	Complex needs assessment	1 mth	Assessment completed	
Clinical Procedures	Anticoagulant Treatment	4 wk	No complications	
	Aural Care	4 wk	Ears free of wax	
	Eye Care	4 wk	Self care	
	IV antibiotics long term	3 mth	IV access maintained/infection managed	
	IV antibiotics short term	2 wk	Infection resolved	
	Hormone Injection	6 mth	Optimum health maintained	
	Vaccination	1 wk	Treatment given	
	Pernicious Anaemia	6 mth	Optimum health maintained	
	Injection	1 wk	Treatment given	
	Care of Central Line	4 wk	Infection free patent line	
Clinical tests	Blood Pressure Monitoring: one off	1 wk	Readings taken and reported	
	Blood Pressure Monitoring: programme	3 mth	Readings taken and reported	
	Blood sugar monitoring: programme	3 mth	Readings taken and reported	
	Doppler	6 mth	Readings taken, actioned	
	Sample collection	1 wk	Sample collected	
	ECG	1 wk	Readings taken and reported	

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	Venepuncture: one off	1 wk	Blood taken
	Venepuncture: programme	2 mth	Blood taken
Elimination	Acute Constipation	1 wk	Problem resolved
	Bowel Care Assessment	1 wk	Assessment completed
	Catheter Care	2 mth	Catheter patient and draining
	Chronic Constipation	6 mth	Problem managed
	Continence Assessment and Management	4 wk	Assessment completed
	Faecal Incontinence	4 mth	Problem managed
	Stoma Care	4 wk	Self caring
Leg Ulcers	Arterial Leg Ulcer	8 wk	Condition managed
	Preventive monitoring	6 mth	Skin condition intact
	Mixed Aetiology Leg Ulcers	6 wk	Ulcer healed
	Venous Leg Ulcer	3 mth	Ulcer healed
Long Term	CHD review	1 wk	Template completed
Conditions	COPD review	1 wk	Template completed
	CHD management update	1 mth	optimum management regime devised, tested, implemented
	COPD management update	1 mth	optimum management regime devised, tested, implemented
	Diabetes Care and Management Ongoing	3 mth	Optimum health maintained
	New Diabetic Daily Care & Management	4 wk	Template completed & regime optimised
Palliative Care	Symptom Management	3 wk	Patient has managed symptoms
	Syringe Driver	1 wk	Medication is administered safely
	End of life pathway delivered	1 wk	Comfortable death
Pressure area care	Prevention	12 wk	Skin intact
Wound care	Chronic	8 wk	Wound stable/improving
	Complex	4 wk	Wound stable/improving
	Infected	4 wk	Infection resolved
	Lymphodema	8 wk	Management of lymphodema
	Post Surgical	2 wk	Wound healed

	Traumatic	6 wk	Wound healed
Enteral Feed Tube Care and	Assessment of Tube fed patient	2w	Assessment completed
Management	Nutritional assessment	8w	Assessment completed
	Nasogastric tube	4w	Adequate nutrition maintained
	Balloon held gastrotomy	3 mth	Adequate nutrition maintained
	PEG tube	3 mth	Adequate nutrition maintained

[1] All our products include advice and support and assessment. We only count these separately when they are the sole reason for our involvement

List of Episodes of Care

Name	Category	Active	Availability
Advise and support	Other / Other	Υ	System Wide
CDD CM Advice and Support to Carer	XXX Community Matron / Advice and support	Υ	District Nursing
CDD INR	Clinical Tests / INR	Υ	District Nursing
CDD ABPI Measurements 26w	Clinical Tests / ABPI Measurements	Υ	District Nursing
CDD Administration of Vaccine 1w	Clinical Procedures / Vaccination	Υ	District Nursing
CDD Administration of Medication 12w	Clinical Procedures / Medication	Υ	District Nursing
CDD Advice and Support for Carers 12w	Advice and Support / Advice and Support Carers	Υ	District Nursing
CDD Advice and Support for Patient 12w	Advice and Support / Advice and Support Patient	Y	District Nursing
CDD Annual review	Long Term Conditions / LTC Review	Υ	District Nursing
CDD Anticoagulent treatment 4w	Clinical Procedures / Anticoagulent treatment	Y	District Nursing
CDD Assessment 4w	Assessment / Assessment	Y	District Nursing
CDD Assessment of Leg Ulcers 2w	Leg Ulcers / Assessment of Leg Ulcers	Υ	District Nursing
CDD Assessment of patients who are tube fed 2w	Nutrition and enteral feed / Assessment of patients who are tube fed	Y	District Nursing
CDD Assessment of Wound 2w	Wound Care / Assessment	Υ	District Nursing
CDD Aural care 4w	Clinical Procedures / Aural care	Υ	District Nursing
CDD Bereavement visit	Palliative and end of life care / Bereavement	Υ	District Nursing
CDD Blood Glucose Monitoring (BM) - occasional 12w	Clinical Tests / BM Monitoring	Υ	District Nursing
CDD Central line care 4w	Clinical Procedures / Central line care	Y	District Nursing
CDD Change of balloon held gastrostomy tube 12w	Nutrition and enteral feed / Change of balloon held gastrostomy	Y	District Nursing
CDD Chronic Wound Management 12w	Wound Care / Chronic Wound Management	Υ	District Nursing
CDD CM Advice and Support to Patient	XXX Community Matron / Advice and support	Υ	District Nursing
CDD CM Annual Review	XXX Community Matron / Annual review	Υ	District Nursing
CDD Comm Matron Active Case Management - High 4w	XXX Community Matron / Active Case Managment	Υ	District Nursing
CDD Comm Matron Active Case Management - Med 12w	XXX Community Matron / Active Case Managment	Y	District Nursing

CDD Comm Matron Active Case Management-Low 26w	XXX Community Matron / Active Case Managment	Y	District Nursing
CDD Comm Matron Assessment	XXX Community Matron / Assessment	Υ	District Nursing
CDD Community Matron Admission Avoidance	XXX Community Matron / Admission avoidance	Υ	District Nursing
CDD Complex Wound Management 12w	Wound Care / Complex Wound Management	Υ	District Nursing
CDD Continuing Health Care Assessment 2w	Assessment / CHC Assessment	Υ	District Nursing
CDD COPD Pathway	Long Term Conditions / COPD	Υ	District Nursing
CDD Electrocardiograph (ECG) 1w	Clinical Tests / Electrocardiograph	Υ	District Nursing
CDD End of life pathway 1w	Palliative and end of life care / End of life pathway	Υ	District Nursing
CDD Equipment Assessment 1w	Assessment / Equipment assessment	Υ	District Nursing
CDD Eye care 4w	Clinical Procedures / Eye care	Υ	District Nursing
CDD Falls Assessment 1w	Assessment / Falls assessment	Υ	District Nursing
CDD General Procedure 12w	General Procedure / General Procedure	Υ	District Nursing
CDD Health Education and Health Promotion 12w	Advice and Support / Health Promotion	Υ	District Nursing
CDD Hormone implant 26w	Clinical Procedures / Hormone implant	Υ	District Nursing
CDD IV Antibiotics - via cannula 2w	OPAT / OPAT	Υ	District Nursing
CDD IV Antibiotics - via mid - line 12w	OPAT / OPAT	Υ	District Nursing
CDD Leg ulcer - Arterial 8w	Leg Ulcers / Leg ulcer - Arterial	Υ	District Nursing
CDD Leg ulcer - Mixed Aetiology 16w	Leg Ulcers / Leg ulcer - Mixed Aetiology	Υ	District Nursing
CDD Leg ulcer - Venous 16w	Leg Ulcers / Leg ulcer - Venous	Υ	District Nursing
CDD Long term blood pressure monitoring 26w	Clinical Tests / Long term blood pressure monitoring	Y	District Nursing
CDD Long Term Diabetes Care and Management 12w	Long Term Conditions / Diabetes Care and Management Ongoing	Υ	District Nursing
CDD Lymphodema Care and Treatment 8w	Wound Care / Lymphodema	Υ	District Nursing
CDD Maintenance and Care of Venous Line	OPAT / OPAT	Υ	District Nursing
CDD Management of balloon held gastrostomy 12w	Nutrition and enteral feed / Balloon held gastrotomy	Υ	District Nursing
CDD Management of Bowel Dysfunction- Acute 2w	Elimination / Bowel management acute	Υ	District Nursing
CDD Management of Bowel Dysfunction- Chronic 12w	Elimination / Bowel management chronic	Υ	District Nursing
CDD Management of nasogastic tube 4w	Nutrition and enteral feed / Nasogastic tube	Υ	District Nursing
CDD Management of PEG Tube 12w	Nutrition and enteral feed / PEG Tube	Υ	District Nursing
CDD Managment of Enteral Feeding tube 12 w	Nutrition and enteral feed	Y	District Nursing
CDD Moving and Handling Assessment 1w	Assessment / Moving and handling assessment	Υ	District Nursing
CDD New Diabetic Care and Management 4w	Long Term Conditions / New Diabetic Care	Υ	District Nursing
CDD Non-Healing Wound 26w	Wound Care / Non Healing Wound	Υ	District Nursing
CDD Nutritional assessment 8w	Nutrition and enteral feed / Nutritional	Υ	District Nursing
CDD Palliative Care Support	assessment		
	assessment Palliative and end of life care / Palliative Care Support	Y	District Nursing
CDD Palliative Care Symptom Management 4w	Palliative and end of life care / Palliative Care	Y	District Nursing District Nursing

CDD Pressure Ulcer - Complex 3 12w	Pressure ulcer prevention and treatment / Pressure Ulcer Grade 3 and 4	Y	District Nursing
CDD Pressure Ulcer - Complex 4 12w	Pressure ulcer prevention and treatment / Pressure Ulcer Grade 3 and 4	Y	District Nursing
CDD Pressure ulcer - Simple 1 4w	Pressure ulcer prevention and treatment / Pressure Ulcer Grade 1 and 2	Y	District Nursing
CDD Pressure ulcer - Simple 2 4w	Pressure ulcer prevention and treatment / Pressure Ulcer Grade 1 and 2	Y	District Nursing
CDD Pressure ulcer prevention 12w	Pressure ulcer prevention and treatment / Pressure Ulcer Prevention	Y	District Nursing
CDD Prevention of leg ulcers 26w	Leg Ulcers / Prevention of leg ulcers	Υ	District Nursing
CDD Proactive care	Assessment	Υ	District Nursing
CDD Promotion of Urinary Continence 8w	Elimination / Continence Assessment and Management	Y	District Nursing
CDD Regular Venepuncture 26w	Clinical Tests / Regular Venepuncture	Υ	District Nursing
CDD Safeguarding Adults 4w	Safeguarding adults / Safeguarding	Y	District Nursing
CDD Sample collection 1w	Clinical Tests / Sample collection	Υ	District Nursing
CDD Short term blood pressure monitoring 4w	Clinical Tests / Short term blood pressure monitoring	Y	District Nursing
CDD Simple Wound Management 4w	Wound Care / Simple wound management	Υ	District Nursing
CDD Stoma Care 4w	Elimination / Stoma Care	Υ	District Nursing
CDD Sub Cutaneous Fluids/Hypodermoclysis	Clinical Procedures / Subcutaneous fluids	Y	District Nursing
CDD Syringe Pump Management 1w	Palliative and end of life care / Syringe Pump Management	Y	District Nursing
CDD Topical Applications 26w	Clinical Procedures / Topical application	Υ	District Nursing
CDD Urinary Catheter Maintenance 12w	Elimination / Catheter maintenance	Y	District Nursing
CDD Urinary Catheterisation 12w	Elimination / Urinary catheter change	Y	District Nursing
CDD Venepuncture short term 2w	Clinical Tests / Venepuncture single visit	Υ	District Nursing
CDD Verification of death	Palliative and end of life care / Verification of Death	Y	District Nursing
CDD Wet Leg - Management 12w	Leg Ulcers / Wet Legs	Υ	District Nursing
Healthcall	Healthcall	Υ	District Nursing
Healthcall LTC Complex	Healthcall	Υ	District Nursing
Healthcall LTC complex DDES	Healthcall	Υ	District Nursing
Healthcall plus	Healthcall	Υ	District Nursing

Appendix 6 - Literature Review

The Queen's Nursing Institute

The District Nursing Workforce Planning Project

Literature Review

Rita Newland

December 2013

1.0 Executive Summary

The District Nursing service in England is an important part of the National Health Service (NHS) reforms which seek to increase the number of people who are cared for in or as close to their home as possible (Health and Social Care Act, 2012, Spilsbury et al, 2013). District nursing services must have sufficient nurses with the appropriate skills and knowledge and be able to use this resource effectively to meet demand (Department of Health, 2013). The services must also have mechanisms in place to explicitly report the way in which demand is met and how they ensure equitable access to a quality service (Department of Health, 2013).

This report, commissioned by The Queen's Nursing Institute as part of its District Nursing workforce planning project presents a review of the literature relating to the following two questions:

- 1. What is the evidence that supports workforce planning within the District Nursing Service?
- 2. What are the ways in which patients are allocated within the District Nursing service?

A critical search of the literature provided 14 papers for review.

Absence of workforce planning in district nursing services may lead to:

- i. Silo working and an inability to manage workload fluctuations across the service
- ii. Inability to influence demand and predict service activity
- iii. Inability to identify situations when demand exceeds supply (of nursing time).
- iiii. Inconsistent workload demand across the service
- iv. Inappropriate use of staff skills resulting in inefficient care provision.

Effective patient allocation requires an understanding of the time required for care delivery, patient needs, available nursing time and the level of patient acuity.

Different approaches exist for workforce planning and patient allocation in the district nursing service. Contemporary approaches in many organisations continue to concentrate on individual teams. However, new approaches are emerging and have been implemented in organisations with the increasing use of Information and Communications Technology (ICT).

Future approaches will benefit from appropriately resourced ICT and precise articulation of requirements so that the design and content remains contemporary over time. It is important to ensure approaches are fully automated in terms of data entry, analysis and reporting.

It is also imperative that future designs ensure the district nursing service is data savvy as well as data rich. This will be achieved with the inclusion of structures that ensure all data have the potential to inform management decisions, for example through the design and use of key performance indicators and appropriate management information.

2.0 Introduction

The district nursing service in England is an important part of the National Health Service (NHS) reforms which seek to increase the number of people who are cared for in or as close to their home as possible (Health and Social Care Act, 2012; Spilsbury et al, 2013). The requirement to avoid unnecessary hospital admission, facilitate timely discharge from hospital and to meet the needs of an ageing population, with an increasing prevalence of chronic disease has never been higher (Department of Health, 2011). It is imperative that district nursing services not only have sufficient nurses with the appropriate skills and

knowledge but that they also use the resource effectively to meet this dynamic agenda (Department of Health, 2013). District nursing services must therefore have mechanisms in place which enable explicit reporting of the way in which they are not only meeting demand but also how they continue to ensure they provide equitable access to a quality service (Department of Health, 2013).

Historically the district nursing service has cared for older people who are unable to leave their home to seek health/nursing care. Care provision and delivery has been the focus of service design at the expense of the need to plan, forecast and analyse the impact of interventions. Traditionally the district nursing service has relied on the clinical skills, knowledge and discretion of the District Nurse who is a registered nurse with the additional qualification of the Specialist Practitioner qualification (District Nursing), to enable them to work independently in community settings. The need for the District Nurse to attain sophisticated skills in management and business acumen has not previously been required (Department of Health, 2011, 2013). However, the advent of the NHS Quality agenda means that the district nursing service must demonstrate it is cost effective, creates a positive patient experience and does no harm to those receiving it (Health and Social Care Act, 2012).

The development of tools to collate, assess and analyse workload, report the use of resources and subsequent outcomes is gaining greater recognition at strategic as well as operational level both nationally and locally within health and social care organisations (Department of Health, 2013). This move is set to create primary/community health care environments in which district nursing services are able to work **SMARTER** with the help of information and communications technology (ICT) to maximise the use of available resources and ensure equity of care provision (Bryar et al, 2012).

The Queen's Nursing Institute is working with NHS England and as part of the Community Nursing Strategy Programme is undertaking a review of workforce planning tools in community settings. This report has been commissioned by the Queen's Nursing Institute as part of its District Nursing workforce planning project. It will present a review of the literature relating to the following two questions:

- 1. What is the evidence that supports workforce planning within the District Nursing Service?
- 2. What are the ways in which patients are allocated within the District Nursing service?

2.1 The search strategy

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/evidence. 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 (Appendix One and Two).

A detailed search was undertaken which included the following databases; Academic Search Complete, Business Source Complete, CINAHL Plus with Full Text, E-Journals, Health Policy Reference Centre, MEDLINE with Full Text, PsychInfo (via EBSCO). Additionally, a detailed search was also undertaken which included the following databases; Journals from Ovid, Embase 1974-2013 November 27, HMIC Health Management Information Consortium 1979 to October 2013, Ovid MEDLINE(R) 1946 TO November Week 3 2013, Ovid Nursing Full Text Plus (via OVID SP).

The search strategy combined the concept of workload analysis and workforce planning (with synonyms) with district nursing (with synonyms). Where supported, appropriate

database headings/thesaurus terms were also used. No date or language restrictions were employed.

3.0 The evidence that supports workforce planning within the district nursing service

3.1 The process and purpose of workforce planning

Workforce planning is the process that allows a series of correct actions to happen in order to deliver cost effective, quality services. It requires decisions to be made which ensure the right people with the right skills are in the right place at the right time. The literature search identified four papers (Appendix One). Only three of these papers directly related to workforce planning in the district nursing service.

However, the fourth paper is included in this report because the programme described was implemented countrywide across Scotland. This outcome will inform programmes for the district nursing service in England and was perhaps achieved because of the provision of senior leadership from Government to field level (Lockhart, 2010).

A key message from the papers is that any programme of workforce planning must be consistently implemented and have a consistent language if it is to provide a mechanism for comparison across the district nursing service.

The process of workforce planning is dependent on the style of caseload management adopted by the district nurse as the team leader. It centres on the way in which this person deals with the caseload activity in terms of the referrals, admissions and discharges. It is also dependent on the way in which the district nurse team leader reports and records activity and the impact of interventions. The papers state that the chosen approach is unique to the district nurse team leader, which again limits the comparability and consistency of the information produced (Kane, 2008).

Kane (2008) describes a systematic process of workforce planning based on caseload analysis. The process analyses data relating to the demography of the caseload and the characteristics of the population served by the district nursing service. The approach presented by Kane (2008) distinguishes between the working caseload and the total caseload. In doing so Kane (2008) acknowledges that each caseload will have a number of patients who receive care from the service at least once per month and others who require less frequent interventions.

The development of workforce planning processes in this study was inhibited as the district nursing teams did not fully engage with the process and failed to complete the required reporting process because of the demands of the caseload. This is a common theme in such studies because they necessitate active engagement from nurses who are also required to deliver the service. The literature also suggests that lack of engagement may be related to a fear of losing team members during times of reported low caseload activity.

Custom and practice has previously allowed disengagement to happen by failing to challenge. This disengagement is thought to be adopted by nurses who want to maintain the status quo. However, the literature states that strategies are being implemented to reduce the impact of such barriers (Lockhart, 2010). This may be a benefit of the research completed in Scotland where senior level engagement and leadership meant that there was no option to opt out of the study (Lockhart, 2010).

Workforce planning is important because without it several disabling features exist and reduce the efficient and effective delivery of the district nursing service as illustrated by the following features:

District nursing teams **work in silos** when meeting the needs of their caseloads. This severely reduces the ability of the service to **manage fluctuations** in workload.

District nursing teams find it impossible to **predict the activity** requirements of the caseload because of the inability to influence demand for the service.

District nursing teams find it impossible to identify situations when demand for the service exceeds supply (the availability of nursing time).

District nursing services fail to recognise when teams have *insufficient staff* to meet the demand.

District nursing teams *use staff skills inappropriately* resulting in inefficient care provision. (Thomas et al 2006).

3.2 Contemporary workforce planning

The papers reviewed agree on three things. Firstly they recognise that workforce decisions are often made on the basis of custom and practice for individual district nursing teams, and are not planned using evidence about the number of people and the skill base required to meet the demand for the service (Thomas et al, 2006).

Secondly, the workload for the district nursing service is inconsistently distributed because it is invisible within individual teams as custom and practice continues to allow teams to work independently of each other. Some teams are therefore overworked and others are underworked. This means that it is not possible to respond to variations in workload by redistributing nursing time to where it is most needed; which increases the risk of delivering a poor quality inefficient service (Kane, 2008).

Thirdly the papers reviewed agree that it is important to understand the demand for the service as well as the factors which drive demand. When designing approaches to workforce planning it is also important to understand the way in which the service responds to demand because this will inform district nursing service in the future (Kane 2008).

Successful workforce planning is reliant on:

- The mechanisms for data entry
- The measurement of data
- The presentation of the data

i. Mechanisms for data entry

The process for entering data is an important feature of workforce planning approaches. Managers must be confident that the information is accurate if they are to use it to make clinical decisions and changes to the workforce. The papers reviewed stated the difficulty in achieving this level of accuracy because the process relies on the honesty and accuracy of individual nurses who enter the data in the absence of rules or definitions (Reid et al, 2008). The study by Kane (2008) sought to increase the objectively and consistency of the information by ensuring that people unrelated to the caseload also entered the information. The validity and reliability of these data was further enhanced with the use of multiple data entry processes so that the final data set was not reliant on a single source of information.

However, the papers reviewed also state that it can take up to two years to create an acceptable level of consistency in the process for data entry. This may limit confidence and willingness to invest in the workforce planning process because of a lack of trust in the data (Kane, 2008). Despite this, Kane (2008) showed that it is possible to achieve consistency and to make changes that have a lasting impact on the district nursing service.

The papers consistently present situations in which there is a manual approach to data entry rather than an automated process. Kane (2008) describes the development and implementation of the eCAT tool for workforce planning in Northern Ireland. Despite using an

electronic database to store and present the data within a series of templates, the entry and reporting process remains manual. The process described is also time consuming, i.e. caseload profiling, audit and analysis. However, the project advocates the benefit of creating templates for data entry that they can be used repeatedly over time. Therefore the first episode for data entry is time consuming but the time required to enter the data reduces on each subsequent occasion as familiarity with the template increases.

ii. The measurement of data

The papers reviewed state that workforce planning processes must measure several metrics to show what is happening in the caseload. These metrics include:

- The number of *referrals*
- The number of admissions
- The number of *discharges*
- The number and *frequency* of visits
- The *duration* of visits

Kane (2008)

The collection and analysis of these data in the Nursing and Midwifery Workload and Workforce Planning programme resulted in a demonstrable increase in efficiency and productivity of the nursing and midwifery services in Scotland (Lockhart et al 2010). This illustrates the significance of these data to the workforce planning process.

The presentation of the data

Reid (2008) states that information relating to workforce planning can be presented using one of four methods:

Professional judgement (subjective decision about the requirements for safe staffing levels). Custom and practice for workforce planning in district nursing services has been undertaken to meet the requirements of single teams rather than the service. This results in systems which present data relating to individual teams rather than the service as a whole. Furthermore many of these systems present the data in terms of the numbers of patients and nurses. However, the papers reviewed state that workforce planning is more effective if data presented show the availability of total nursing time, the associated grade/skill mix across the service and the total demand for the service in terms of patient dependency, acuity and required skill base for care delivery. This method of presenting information would offer greater flexibility and sensitivity when responding to change.

- **ii.** Population and health needs-based methods (presents information using the social determinants of health). The papers reviewed state that presenting data which links to the social determinants of health is helpful when considering workforce requirements of the caseload. Such data presentation is also vital when considering the public health impact of the district nursing service because of the links to the Public Health Outcomes Framework and associated outcomes (Department of Health, 2012). This would provide comparison across the service as well as throughout England.
- **iii. Caseload analysis** (presents information based on the needs of patients admitted to the case load).
- **iv. Dependency-acuity** (presents information about patient dependency in terms of the need for nursing time as measured by the frequency and duration of interventions).

The papers reviewed are consistent in the message that information must be presented graphically. This makes it easier to see key messages at a glance and allows the data to be analysed in a timely manner so that it is possible to quantify the quality of nursing care (Kane, 2008). These data would benefit from presentation within a dashboard to allow key

data sets to be reported side by side and facilitate comparison. It also allows identification of variances in service provision and delivery which require urgent attention. Furthermore the measurement and comparison of impact of the service over time would be possible if parameters for required impact were presented as key performance indicators (KPIs). This system is commonly used at senior management levels within the NHS as well as clinical care areas in secondary care; however, its use is not commonly seen in the district nursing service and was not evident in the retrieved papers for this report. This would however, meet the need for presenting data in graphical form.

4.0 Ways in which patients are allocated within the district nursing service.

The allocation of patients is one element of the total workload of the district nurse team leader within the district nursing service. It should be considered alongside the aspects of leadership, management and care delivery. Historically the allocation of patients to members of the district nursing team has been a subjective process, influenced by custom and practice. Patient allocation decisions are influenced by several related factors including the number of registered nurses available, the number of clients to be seen and the geographical location of the consultation.

Conventional patient allocation is task orientated and considers patients in terms of their diagnosis or nursing need, for example the treatment of a leg ulcer, and the need for insulin injections. The advent of the quality and equity access agenda in the NHS makes it increasingly important to ensure patient allocation considers the person rather than the diagnosis so that people receive the district nursing service they need and available resources are used in the most cost effective and efficient way possible.

4.1 Patient allocation

The literature illustrates that patient allocation in district nursing services lacks a consistent, systematic approach on a national or local level. This negates the potential for comparison across the service in terms of practice, impact, efficiency and effectiveness (Thomas et al, 2006).

Eleven papers were selected during the literature search. Each paper considered patient allocation as a component of the district nursing workload and/or management of the caseload (Appendix Two). Several themes emerge from the literature including:

The importance of *recording* time used

The importance of *classifying* patient need

The importance of *counting* nurses' activity

The perceived level of patient acuity

The reliance on *retrospective* recording.

Nine of the eleven papers present the development and implementation of a tool to manage and allocate the workload in district nursing services or equivalent (i.e. public health nursing service in Northern Ireland).

It is clear from the literature reviewed that these tools provide a mechanism for creating the much needed systematic approach to patient allocation. They also facilitate consistent practice with the inclusion of rules for engagement. However, the current context for development and implementation means that the tools are often designed in response to local need and implementation is retained within the host organisation. This again limits the potential to compare patient allocation practice and subsequent impact across England.

The literature illustrates that patient allocation comprises three consecutive stages:

- The allocation process
- The allocation decision
- The report and recognition of impact

The allocation process

Traditional patient allocation processes are manual and labour intensive. They involve the creation of a list on a daily basis which contains the names of nurses who are available to work alongside the names of patients needing to be seen. Every nurse in the team is provided with a list of people they must see each day. The nurses are required to record the details of their contact with each patient they have seen in order to report their daily activity.

This allocation process depends on the accuracy of the person allocating the work and is open to error, for example, names may be missed off the list or may be included when they do not need to be seen (Dean, 2013). It is also open to wide variation because the lack of a decision making formula means it is open to individual interpretation. The literature states that allocation decisions are often made in a linear way in response to demand and without consideration of the nursing time available (supply). This creates a situation in which demand exceeds the supply of nursing time and individual teams struggle to cope because they are unable to manage the situation (Baldwin, 2006).

The characteristics of contemporary district nursing caseloads include a large number of older people, with multiple diagnoses, polypharmacy and a myriad of psychosocial needs. The literature illustrates that organisations are moving away from using these manual, labour intensive and linear allocation processes and are seeking ICT solutions to create electronic automated processes (Byrne et al, 2006; 2007; Brady et al, 2008; Dean 2013; Thomas et al, 2006; Dean 2013). For example, the Community Client Need Classification System (CCNCS) model allows a prediction to be made about client need (dependency) (Byrne et al, 2006; 2007; Brady et al, 2008). This is important because research shows that higher levels of dependency require increasing levels of nursing time (Byrne, et al 2007). This model requires retrospective data entry and produces a report outlining the way in which the district nursing team members have used their time over a defined period. It also provides an insight into the complexity of the patients within the caseload because it allows the allocation of a score to specific tasks and the recording of time taken to complete the tasks (Byrne et al, 2006).

A possible limiting factor with this and other retrospective data entry tools is the lack of accuracy, especially when entry requires precision. This is because inadequate time is allocated by many nurses to the data entry process (Baldwin, 2006; Thomas et al, 2006). However, this has been shown to resolve over time as nurses become more familiar with the tool (Thomas et al, 2006). Once an accurate data set is created it becomes a useful aid for patient allocation because of the relationship it displays between time required for care delivery, the frequency of nursing contacts and the perceived dependency of the patient.

The workload allocation tools currently available present a similar resource for patient allocation as the CCNCS tool. They require retrospective data entry and produce a report outlining nursing activity, and/or patient dependency and/or patient acuity (Byrne et al, 2006; Goldstone et al, 2000). The report produced by these tools allows for managerial decisions about the use of resources including time and staff because of the potential to analyse historical data. However, the analysis is again a manual process and requires a depth of understanding and ability to interpret the data.

The allocation decision

The literature emphasises the importance of making patient allocation decisions using best available evidence. This is one of the drivers within in the Domiciliary Scheduling in the Community system (DominiC) designed for use by the district nursing service in Stockport (Dean, 2013). This computer system collates prospective data which is entered at the point

of referral. It uses these data to produce a daily schedule for each team and allocate an appropriately skilled nurse to undertake the activity. The development of this and similar systems is dependent on the creation of well-informed software design and requires significant engagement of district nurses with the skills, knowledge and experience to articulate and justify the specification (Thomas et al, 2006). It also requires on-going engagement to inform the use and future development of the software and ensure that it continues to support contemporary district nursing service delivery (Thomas et al, 2006).

The ability to allocate different types of work including direct patient care, indirect patient care and other role related activity is also an important factor influencing patient allocation decisions. This is considered within the Wiseman workload measure (Wiseman, 2010). It allows an estimation of the time needed to complete the activity within prescribed parameters and requires entry of the actual time taken to complete the activity. This promotes effective allocation decisions by considering the sufficiency of the total face-to-face contact (*nursing*) time available within the service. It is another retrospective data entry system which means that current decisions are made using past experiences.

However, the fact that this system incorporates a 2:1 ratio of direct: indirect care means that appropriate time is available for nurses to complete the required reporting process which increases the potential for accurate data entry (Wiseman, 2010). Despite not being designed specifically for district nursing services this system has many features which increases its compatibility not least its use with community mental health services.

Systems that prescribe the proposed duration of the nursing intervention in line with the dependency of the client are also used by district nursing services (Thomas et al, 2006). The West Hertfordshire Activity and Time Dependency Tool (WHATT) is a patient allocation system that measures actual time used by the district nursing service by requiring verification following care delivery. Patient allocation decisions about the duration of the activity are made in 15 minute units (Thomas, et al 2006). This is also the system outlined within the Warrington Tool (Baldwin, 2006).

It is not clear in the research how the 15 minute limit was decided. It is however, expected that situations will occur in which there is a difference between the predicted and actual time and that this information is valuable when making future workload allocation decisions (Baldwin, 2006; Thomas et al, 2006).

However, these studies state that this is not always the case and nurses did not enter the actual time but merely verified the prescribed time even if this was incorrect (Baldwin, 2006). This may be a lack of understanding of the tool or may be related to nurses' fear of reprimand if they have spent too much or too little time with the patient. It is therefore important to acknowledge the prescribed time as an indicator of the time required rather than the maximum time available. It is also imperative that changes are made over time once data analysis is complete.

The report and recognition of impact

Traditionally district nursing services have concentrated on admission to the case load and subsequent care delivery. This is perhaps related to the historical demographic profile of the caseload. However, the emerging caseload profile within contemporary district nursing services suggests that people may only need district nursing care at specific periods and once this need is resolved their care requirements will be met by other agencies including social care (Health and Social Care Act, 2012).

This suggests that patient allocation systems must accommodate the need to discharge from the district nursing service once the need for nursing care in the home has subsided. Such patient allocation systems will need to be able to allocate patients to appropriately skilled nurses within a prescribed time period to complete a reassessment and to review the plan of care.

The model proposed by Bentley and Tite (2000) outlines the use of computer software which enables the service to objectively measure the outcome of interventions delivered during care. This is important because it allows reporting of the impact of the care delivered. If done well it also triggers action in a timely manner when care delivery is not having an impact. This system is however limited, in that it requires manual data entry and analysis. Nevertheless, it is an important addition to the available patient allocation systems because it introduces the need to identify and act on the outcome and impact of care delivery.

5.0 Conclusion

The report has outlined the context for workforce planning and patient allocation in district nursing services in the UK. It is clear from the papers reviewed that different approaches exist for both these elements of district nursing service provision. Contemporary approaches in many organisations continue to concentrate on individual teams within the service. They are also inconsistent, non-systematic and subjective. However, new approaches are emerging with the increasing use of ICT which are systematic and illustrate a greater level of objectivity and consistency. Disappointingly, these only operate in the organisations in which they have been developed. There is no evidence that one approach has been implemented in all of the district nursing services across England. However. A single approach has been implemented in Scotland, through the workload and workforce planning programme (Lockhart, 2010).

Future approaches will benefit from appropriately resourced ICT and precise articulation of requirements so that the design and content remains contemporary over time. It is important to ensure approaches are fully automated in terms of data entry, analysis and reporting. This will ensure that the time required to gain accurate and appropriate information is not greater than the benefit received. This level of automation will negate the incidence of human error and will ensure that the data are trustworthy, available and accessible for analytical scrutiny over time.

It is also imperative that the design ensures that the district nursing service in the future is data savvy as well as data rich. This will be achieved with the inclusion of structures to ensure all data have the potential to inform management decisions for example through the precise design of key performance indicators and appropriate management information.

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Appendix 7 - UWL Capacity Tool reports

Oxford Health NHS FT District Nurse CAPACITY TOOL INFORMATION VERSION 6

September 2013

Crib Sheet

0 – 20 minutes	1 unit
20 – 40 minutes	2 units
40 – 60 minutes	3 units
(10 minutes)	(0.5 unit)

Allocation of units:

8 hours equates to 24 units

7.5 hours equates to 22.5 units

6 hours equates to 18 units

4 hours equates to 12 units

Lunch break -30 minutes

All shifts are based on 7.5 hours-7 days per week-any hours worked over this should be claimed as TOIL-as agreed with your line manager.

If there are vacancies then extra hours may be paid subject to approval by your Locality Manager.

All activity to be deducted from clinical units-e.g. supervision, meetings, training, e-proc, ONPOS etc

Breakdown of Units by Band and Working Hours

BAND 2-3

No: of hrs worked	Clinical units	Unpredicted activity/Team management	RIO	Lunch	Travel	Total day units
7.5	14.5	2	2	1.5	4	24
6	11.5	2	1.5	0	3	18
5	9.5	2	1.5	0	2	15
4	8.5	1	1	0	2	12

BAND 4

No: of hrs worked	Clinical units	Unpredicted activity/Team management	RIO	LUNCH	TRAVEL	Total day units
7.5	13.5	3	2	1.5	4	24
6	10.5	3	1.5	0	3	18
5	9.0	3	1.0	0	2	15
4	7.5	1.5	1.0	0	2	12

BAND 5

No of hrs worked	Clinical units	Unpredicted activity/Team management	RIO	Lunch	Travel	Total day units
7.5	13.5	3	2	1.5	4	24
6	10.5	3	1.5	0	3	18
5	9	3	1.0	0	2	15
4	7.5	1.5	1.0	0	2	12

BAND 6

No of hrs worked	Clinical units	Unpredicted activity/Team management	RIO	Lunch	Travel	Total day units
7.5	10.5	6	2	1.5	4	24
6	9	4.5	1.5	0	3	18
5	8.5	3.5	1.0	0	2	15
4	6.5	2.5	1.0	0	2	12

THE LATE (1030-1830)

Band 5

No of hrs worked	Clinical units	Unpredicted activity/Team management	RIO	Lunch	Travel	Total day units
7.5	13.5	3	2	1.5	4	24

Band 6

No of hrs worked	Clinical units	Unpredicted activity/Team management	RIO	Lunch	Travel	Total day units
7.5	10.5	6	2	1.5	4	24

Assigned units (please do not change these)

Co-ordinator role Large Teams	3 units
Co-ordinator role Small Teams	2 units
Initial Assessment including liaison and paperwork	4 units
Follow up new assessment including treatment	3 units
Named Nurse re-assessment	2 units
Monitoring e.g. WALSALL, MUST, BP etc	1 unit
Medication visits-Insulin, Fragmin, B12	1 unit
Catheter change	2 units
Leg Ulcer	2 units
PICC Flush	2 units

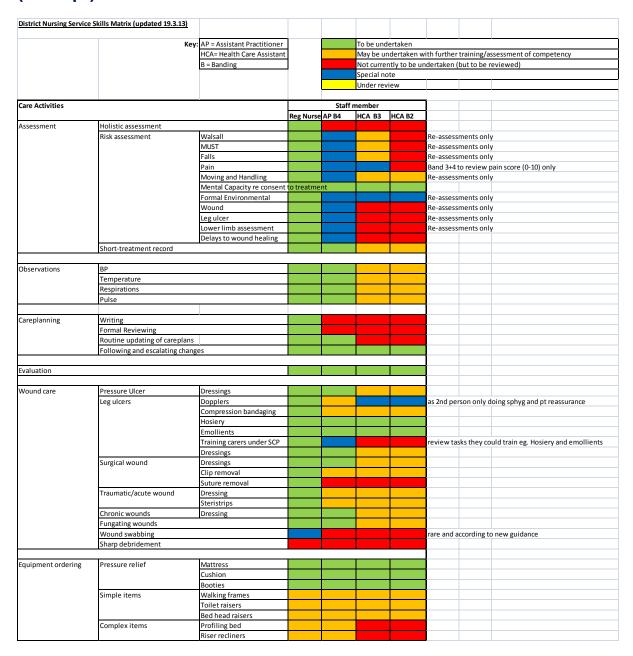
IV antibiotics/infusion	3 units
Phlebotomy	1 unit
Simple dressings	1 unit
Pressure damage	2 units
Complex dressings	2 units
Syringe Driver/End of Life/Palliative Care	3 units
Liaison for Syringe Driver/End of Life /Palliative Care	3 units
Shared Care Training	3-6 units (task dependent)
Bereavement visit	2 units
Continence assessment	2 units

Aural Toilet (Ear syringe)	2 units
Long term conditions monitoring	1-2 units
Travel	4 units
RIO –out coming	2 units
Lunch	30 minutes
Morning stand up meeting	1 unit
Daily handover	2 units
Weekly general caseload review	3 units

Points to be considered

- 1. For initial assessment visits additional units will be required for treatment
- 2. Unpredicted units-for additional visits or for when allocated visits run over time or travel takes longer than expected
- 3. If providing 2 treatments add appropriate number of units together e.g. Pressure damage 2 units and Medication visit 1unit = 3 units to be allocated.
- 4. 0.5 unit to be used to give that little bit extra time for a visit-patient specific
- 5. New staff-to be given reduced capacity and extra units per visit eg. add an extra 0.5-1 unit
- 6. Students A Student should be supernumerary unless visiting patients alone and who have been specifically allocated to them. All Students should be allocated an additional unit per patient.
- 7. Training & Induction This will require the allocation of clinical time.
- 8. Training and meetings need to be taken out of clinical time.
- 9. Shared care training or any delivered training is to come out of clinical time
- 10. Documentation Inputting to a Patient record whether written or IT is considered clinical work.

Appendix 8 - District Nursing Service Skills Matrix - Oxford Health (excerpt)



Appendix 9 - Stockport "DominiC" tool presentation slides



Domiciliary care system in the Community

"DominiC"

Kay Durrant Head of Service, District Nursing



Your Health. Our Priority.



DominiC the driver for improved safety & quality

- Action on reducing errors.
- Improve efficiency of the service.

Aid Business Continuity planning

Initially supported by Queen's Nursing Institute grant under the Innovation award scheme.



Your Health. Our Priority.



DominiC meeting patient needs

- · Choice of time
- Continuity of care
- Improved communication
- Time to care
- Medical device management



Your Health. Our Priority.



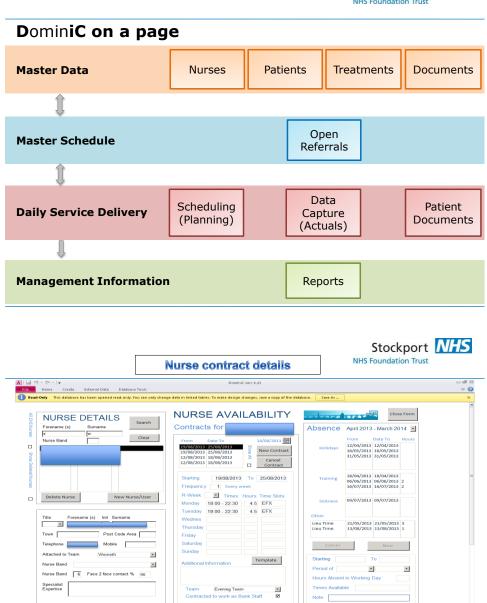
where do we go from here – future plans

- Supports transformation agenda
- Information sharing across services
- Centralised referral source for all domiciliary services
- Mobile tablets



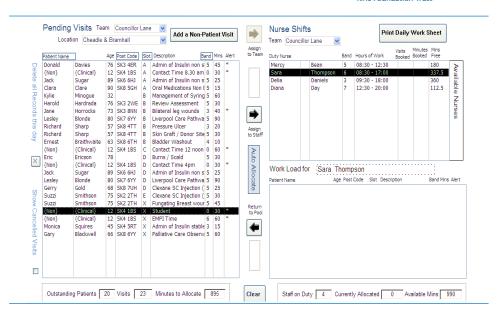
Your Health. Our Priority.





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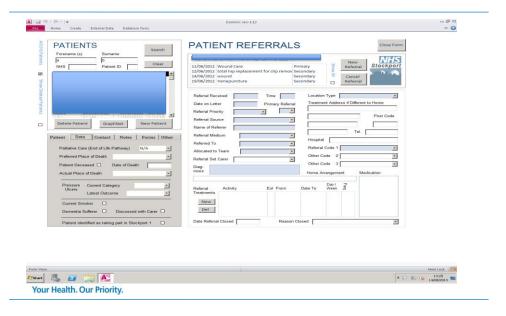




District Nurse Activity Sheet Visits booked for 10/09 Thompson Band 6 Working 08:30-17:00 Hours 7.5 Nurse Sara Patient Name, Gender, Age Current Address EoLC Patient Home Team Band Time Start End Mr {Non} {Clinical} m 12 Community Health Stockport, Floor 10, Regent House, STOCKORT, SK4 1BS Councillor Lane 0 A Contact Time 8.30 am Mr Donald Davies m 76 *** 125 The Long Road, STOCKPORT, SK3 4ER Councillor Lane 5 A ESBL : C.Diff : Admin of Insulin non stable & BM Mrs Jane Horrocks f 73 *** 123 Upton Dreve, STOCKPORT, SK3 8NN GSF3 Councillor Lane Patient is one of multiple births - ensure correct id. : Wound Care Bilateral leg wounds GSF3 Councillor Lane Mr Harold Hardrada m 76 *** 21 The Green, STOCKPORT, SK3 2WE Visit in Two's: Pages for Sara Thompson: 1 of 3 10/09/2012 09:09:33

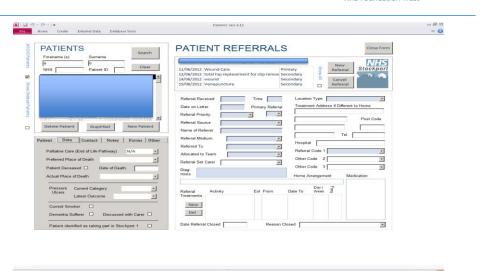
Patient data for CQUIN's





Patient data for CQUIN's

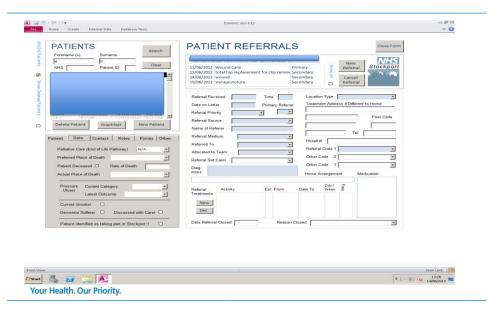




Your Health. Our Priority.

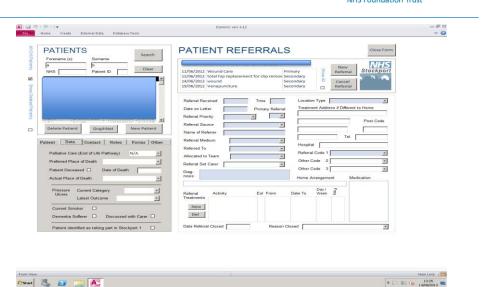
Patient data for CQUIN's





Patient data for CQUIN's





Your Health. Our Priority.

Appendix 10 - Stockport Electronic Master Patient Index (eMPI) Allocation System

Summary

The eMPI (electronic master patient index) is a patient focused scheduling tool, developed by Stockport District Nurses to enhance patient experience and patient safety. The system aims to improve the care of housebound patients by:

- Increasing patient choice of the time of district nurse visit
- Improving patient safety by reducing the number of missed visits
- Eliminating medication errors due to allocation errors

In essence the eMPI ensures that patients are provided care by the right nurse, with the right skills at the right time. In addition to the initial aims, the system has benefited service improvements by providing:

- · Continuity of patient care
- Business continuity
- · Improved data quality
- Quick access to data for audit
- Greater transparency (both individual and team work loads)
- · Prospective data for effective workforce planning
- Reduction in use of bank staff and associated cost benefits

Next Steps

Following a successful pilot in 2010 (supported by the QNI and Burdett Trust) we have now 'rolled out' the eMPI to all 19 community teams. We are now undertaking the roll out of remote tablet style devices to offer even greater flexibility to meet the ever-demanding needs of home based care.

In the long term we aim to utilise the eMPI as the cornerstone that will support a multidisciplinary approach to supporting patients care across both health and social care settings.

Appendix 11 - UWL Community Staffing Methods presentation slides

Slide 1

##UWL Master Class, July 2013

Community-staffing Methods

Keith Hurst
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and
Deirdre Kelley-Patterson,
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Slide 2

Presentation Objectives

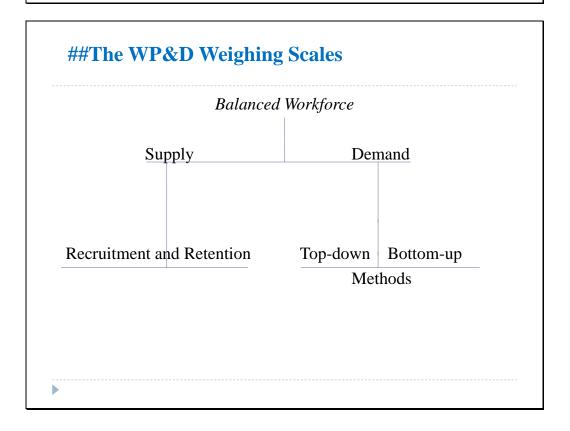
- Define and contextualise community workforce planning and development (WP&D) 10 min's
- 2. Briefly describe the main WP&D methods -5 min's.
- 3. Use the NHS Benchmarking Database to profile your organisation 60 min's.
- 4. Explore community patient dependency and acuity, staff activity and community nursing quality 10 min's.
- 5. Estimate locality team community staffing establishments using staffing 'multipliers' and use the software for what-if purposes 60 min's.
- 6. Explore community staffing establishment and staff mix; notably efficiency and effectiveness 30 min's.
- 7. Describe briefly what's round the corner -15 min's.
- 8. Point you to the supporting literature -5 min's.

##Defining Workforce Planning and Development

Workforce planning and development (WP&D) - the five 'rights':

Getting service-quality right by ensuring that the right full-time equivalents (FTEs) with the right skills are in the right place at the right time at the *right price*.

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##Community WP&D - the Context

- 1. Rising workload: older, sicker inpatients and the shift from acute to primary/community care.
- 2. Historical and irrational staffing establishments. Some establishments and costs are double the average with no discernible service-quality differences. Is that justifiable and sustainable?
- 3. New policies and practices, such as: the Quality, Improvement, Productivity and Prevention Programme (QIPP); e.g., staff in some localities are unproductive 20% of the time. Can/should we sustain that?
- 4. Around 1 in 4 staff is away from work at any time, but should we reward a 6% sickness-absence rate?

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##Community Context ...

- 5. Can we reduce the 15% travelling time?
- 6. New grades and roles, such as Band 4 Assistant Practitioners, are causing us to re-think staff mix.
- 7. Will health service regulatory managers and the Francis Report make ward staffing systems compulsory?
- 8. Integrated (NHS) health and (LA) social care services 30 pioneer sites.
- Information management and technology Scotland's system.

##Classifying Community Staffing Methods

Macro, top-down, population-based:

1. NHS Benchmarking database covers: (i) Primary and community care; (ii) Acute; (iii) Maternity; (iv) Psychiatry/Learning Disability; (v) Private providers; (vi) Ambulance; and (vii) Social Services.

Micro, bottom-up or workload-driven methods (ranked from simple to sophisticated):

- 2. Professional judgment (consensus) methods; e.g., Telford.
- 3. Full-time equivalent (FTE) to population ratios.
- 4. Workload-quality; e.g., Safer Nursing Care Tool.

Triangulating methods

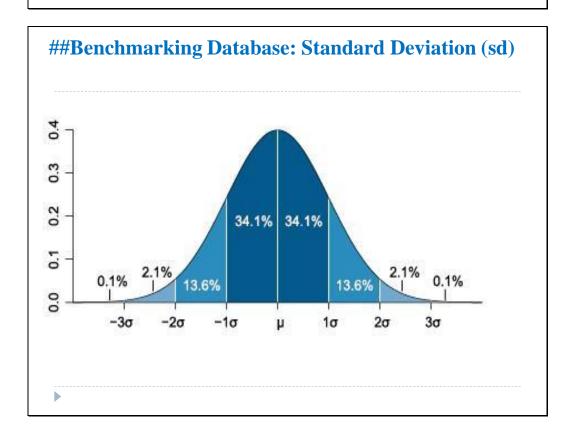
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##Top-down - NHS Benchmarking Database Database components: **Population** Response rates PCT/PCO **Employment** Acute & Maternity Morbidity, mortality **Local Authority Deprivation** 1500 'Region' → CCGs **Ambulance** Crime **Datasets** LIT **Finance** MH/LD **Activity** Service access **Independent sector** Service quality **Patient satisfaction** Staffing, etc.

##NHS Benchmarking Database Structure

- 1. Two tabs: (i) database and (ii) definitions/profiles.
- 2. Available in Excel and SPSS format.
- 3. Rows contain each organisation's data, which can easily be filtered; e.g., community trusts.
- 4. Columns contain datasets, organised alphabetically.
- 5. Dataset definitions, creation and assimilation dates older datasets.
- 6. Data source and data accuracy.
- 7. Locating outliers using standard deviations.

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##Database Structure, cont ...

- 8. Best-practice trusts and other benchmarks, such as deprivation, ethnicity, etc.
- 9. Making connections, underlining the trust's WP&D implications.
- 10. Getting updates and accessing archives.
- 11. Profiling service.

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##Using the Benchmarking Database

Answering specific WP&D questions:

- 1. What are your trust's implicit and explicit WP&D issues?
- 2. Where is your trust an outlier? Grouping your outliers.
- 3. Are top-rated trusts good role models?
- 4. Why are some staff more productive? Is it, for example, because job satisfaction is higher?
- 5. Why are patients more satisfied in some trusts?

##Using the Benchmarking Database – cont ...

- 6. Why are some trust's reference costs up to three-times higher?
- 7. What bear-traps are in the database?
- 8. Does the profile offer clues about delivering services in austere times?
- 9. Can we synthesise new intelligence from service quality, patient safety, management, job satisfaction, staffing and cost data?
- 10. What staffing clues emerge?

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##Community staff per capita – an example

Dataset (r = row)	All C'mnty Tr'sts	Trust A	Trust B
FTE to pop ratio (r1067/1296)	1:1933	1:984	1:1346
RN % (r1308)	8.3	11.5	6.4
Chronic Kidney Disease (r866)	3.4	5.2	4.4
AHP/STT % (r1309)	5.2	3.6	6.4
Reference cost (r641)	108	114	106
CQC quality rating (r1163)	5.2	4	5.8

- 1. Trust A and B are better staffed than the community hospital average.
- 2. Trust B workforce is more 'dilute'.
- 3. Managers in both trusts might think about creating a specialist team (RNs and Nutritionists) to focus on preventing, monitoring and treating kidney disease an expensive, revolving-door HRG.
- 4. What explains the reference-cost differences?

##Community Staffing Multipliers

- 1. Project is 'work in progress'. We have data from 3350 staff working 24,106 days (C45). Staff (all grades) kept a diary, spanning 24hrs, Mon to Sun, and recorded almost 970,000 interventions (C43).
- 2. Scotland health board (where the system was created) and England trust staff use different workload drivers; so the spread-sheet gives you a choice.
- Method 1: enter daily patients (C3 to F3) for each care level (easier to collect). Patient dependency/acuity is defined in the Word.doc hand-out (p.4); or
- 4. Method 2: Enter daily intervention (C6 to F6) for each care level (a more sensitive workload indicator). Interventions are defined in the Word.doc hand-out (p.6).
- We can recalibrate your local (electronic or manual) dependency classification system to suit the C2 to F2 definitions and multipliers (hidden).

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##Community Staffing Multipliers ...

- Each community practitioners, on average, visit almost 12 patients each day (G2). The 'case-mix' in C4 to F4 provides a benchmark. Red values are replaced with local data.
- 6. Alternatively, staff delivered almost 14 interventions each day (G6). Red values are replaced with local data.
- 7. Validity and reliability the 'Incremental rise' phenomenon (C8 to F8).
- 8. Workload index (G5) shows whether each FTE is under- or overoccupied. It is calculated from patient numbers, case mix, direct care time and the 'overhead'. Cell G7, although calculated differently, is interpreted similarly.
- 9. Time-out (G8) are spells away from work caused by sickness, annual, study, maternity, compassionate and annual leave.

##Community Staffing Multipliers ...

- 10. Average working day (G10) is less than 7.5hrs because part-time staff were included in the census. However, community staff in the census sometimes worked 12+hr days.
- 11. Staff activity (D12 to D42) are for benchmarking.
- 12. D12 shows that community staff spend 37% of their time in direct patient care. Cells D13 to D25 show precisely how staff spend their time with patients. Nursing procedures (D22) is the greatest face-to-face task.
- 13. Indirect care (D26), one step removed from the patient, is relatively low activity (12%) unlike ward nursing equivalent which is more than double (26%).
- 14. Clinic time (D31); i.e., patients coming to the nurse, recorded separately, is a relatively low workload. Nevertheless, the Scottish project team is thinking about shifting clinic time to direct patient care to better reflect practitioner workload.

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##Community Staffing Multipliers ...

- 15. Associated work is about one third of staff time clerical work about half that (D35). If 85% of the community workforce are RNs (C51) then does clerical work use their time efficiently and effectively? Do we need to review staff mix?
- 16. One in seven staff do nothing more than travel (D41) a necessary evil?
- 17. Exceptions (D42), e.g., helping an injured pedestrian, isn't a huge component.
- 18. Unusually, actual staffing exceeded funded (B47 vs. B46) because actual staffing includes bank, agency and overtime, so why not convert these temporary staff into substantive posts?
- 19. On average, almost 114 FTE community staff (C47) were employed in each trust (huge range). The red cells (C/D 47) need replacing with local data.

##Community Staffing Multipliers ...

- 20. If these dependency/activity data were typical then based on the workload index (G5 or G8), calculated from the locality staff's current caseload, the team was 28 FTEs short (C49 (C48-C47)).
- 21. To calculate ideal staffing for your locality, replace C3 to F3 or C6 to F6 and C47 or D47 red items with local data and note the staffing increase or reduction in C49 or D49.
- 22. Remember, around one in five FTEs (time-out) will be away at any time (G9).
- 23. Actual RN to SW ratio is 8.5 to 1.5 (C51 and C52). Grade mix, broken down precisely in C53 to C59, is based on grade 2 to 8's actual contribution to patient care. You can adjust the staff mix using professional judgement.

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##Community Staffing Multipliers ...

- The Scottish project team haven't completed their service quality audit (work in progress). However, service quality delivered by 261 English community staff in 21 locality teams has been audited (C69).
- 25. Service quality isn't brilliant (C60 to C68); no doubt related to the heavy workload (G5 or G8).
- 26. Once service quality has been audited in more localities, the plan is to use only staff activity from the highest-quality services to create the staffing multipliers so that we don't extrapolate from poor practice.
- 27. The what-if function.
- 28. Next step is to create AUKUH-SNCT type care levels and definitions so that team managers can regularly and easily monitor workload and staffing.

Appendix 12 - UWL Community Nursing Workload Project analysis

A	В	C	D	E	${f F}$	G
1	Results	Community	DNs	Area	All	
2	Workload and Staffing	Dep.1	Dep.2	Dep.3	Dep.4	Total
3	Patients (dly avrg)	1.3	3.1	3.8	3.3	11.5
4	Patient mix	11%	27%	33%	29%	
5	Direct Care Time (dly avrg)	42.0	23.7	25.2	25.7	1.25
6	Interventions (dly avrg)	3.4	3.7	4.0	2.7	13.8
7	Casemix	24%	27%	29%	20%	
8	Direct Care Time (dly avrg)	16.4	19.7	24.1	30.9	1.25
9	Time out					22.3%
10	Average working-day					6.7
11	Activity	Minutes				
12	Direct Care	3587054	37.0%			
13	Medical procedures	4320	2.4%			
14	Communication	26230	14.8%			
15	Nutrition	1139	0.6%			
16	Hygiene	4710	2.7%			
17	Elimination	1400	0.8%			
18	Medication	27620	15.5%			
19	Movement	2400	1.4%			
20	Vital signs	7750	4.4%			
21	Specimens	8830	5.0%			
22	Nursing procedures	93870	52.8%			
23	Escorting	1720	1.0%			
24	Teaching patients	1020	0.6%			
25	Assisting other staff	1040	0.6%			
26	Indirect care	1129671	11.6%			
27	Charting	32510	27.1%			
28	Reporting	44695	37.3%			
29	Communicating - staff	35380	29.5%			
30	Communicating - relatives	7240	6.0%			
31	All clinic time	203169	2.1%			
32	Associated Work	3325345	34.3%			
33	Teaching and learning	18170	13.3%			
34	Cleaning	2380	1.7%			
35	Clerical	74820	54.8%			
36	Administration	14550	10.7%			
37	Errands	3400	2.5%			
38	Supplies	4810	3.5%			
39	Meetings	9480	6.9%			
40	Supervising	8870	6.5%			
41	Travel	1336620	13.8%			
42	Exceptions	93352	1.0%			

43	Total	9697485	
44	Staffing	FTEs (int)	FTEs
45	Days Observed	24106	(pat) 24106
46	Funded FTEs	98.7	98.7
47	Actual FTEs	113.6	113.6
48	Recommended FTEs	141.5	141.5
49	Shortfall FTEs	27.9	27.9
50	Grade Mix	Breakdown	
51	RNs	85%	
52	SWs	15%	
53	Band 8	0.01%	
54	Band 7	6.0%	
55	Band 6	24.7%	
56	Band 5	53.8%	
57	Band 4	0.0%	
58	Band 3	12.1%	
59	Band 2	3.1%	
60	Quality Overall	58%	
61	Staffing efficiency and effectiveness	33%	
62	Working environment	69%	
63	Supervision and teaching	31%	
64	Patient assessment and care plan'g	79%	
65	Documentation	50%	
66	Team work	65%	
67	Communication	65%	
68	Safe and effective care	70%	
69	Total audits	261	

Appendix 13 - Electronic Referral and Caseload Scheduling material



Electronic Referral and Caseload Scheduling for District Nursing

Technology is a key enabler of transformational change and can support improvements in delivery of high quality, efficient, effective, safe patient care.

A key project in District Nursing in South Tyneside NHS Foundation Trust introduced Hydra, an electronic tool to manage referrals and scheduling of patient care in 2012.

The change project applied Lean tools to demonstrate outcomes of the change.

SERVICE STARTING POINT





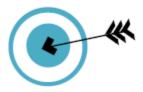


PROJECT AIMS

Introduce real-time electronic process and remove paper based processes

Standard work supported by clear roles and operational policy

Free up time to care by reducing admin time for clinical staff



LEAN TOOLS USED











Value Stream Mapping **Process Timings** Waste Wheel Standard Work

Change workbook



PROJECT APPROACH



Multi-disciplinary team established



Solutions focused action learning group



Extensive clinical engagement





BENEFIT OUTCOMES

Reduction in drug errors as a result 42% of missed visits

7%

Less clinical time spent on admin

2 %

Increase in face to face time with

patients

6%

Less time spent on travel

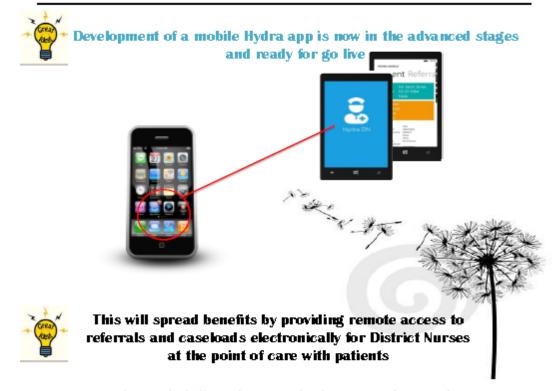
65%

Increase in uptake of training

100 % Compliance with the community data set



SPREADING INNOVATION AND THE NEXT STEPS



The NHS is challenged to use technology to transform services