SERVICE DESCRIPTION

NQM Care Workforce Analytics

Using data to match GP practice capacity with demand

GPplanner

Version 1.00 09/06/20

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Nquiringminds
Care Workforce Analytics

1. Overview

The workforce in general practice is under pressure from increasing demand and challenges in staff recruitment and retention. These issues combined with a long-standing shortage of GPs has led to reduced capacity which is expected to get worse over time.

One way of managing the gap between capacity and demand is to use the skills of other healthcare professionals including nursing, pharmacists, and physiotherapists to take on some of the work usually undertaken by GPs. This has already been proven a success with nursing.

The Workforce Tool has been designed to determine the number of GP consultations which might be freed up by using the wider practice staff. It calculates the workforce mix required to meet the shortfall and the potential cost savings. It is based on national data sets and research, but all elements can be refined to account for local variations.

It also allows PCNs and CCGs to plan future workforce requirements by examining aggregated GP practice level information on staff numbers, vacancies, trainees and upcoming retirements.

It is scalable, in that it can be used for anything from a single-handed practice to a CCG-wide or PCN-wide catchment area.

This tool has been developed as part of the work of the Wessex Primary Care Project, a collaboration of Health Education England (Wessex), Wessex Clinical Senate and the Wessex Academic Health Science Network (AHSN).

1.1.   Features

- For each GP Practice, CCG or PCN the Workforce Substitution Calculator determines:
    - The total annual number of GP consultations
    - The number of GP consultations that could be undertaken by other healthcare professionals
    - Suitable substitution staff
    - The cost savings from the substitutions
- The Skills Calculator returns suitably qualified staff for any give mix of condition and consultation type Gladstone bag approach.
- The Workforce Planner allows CCGs and PCNs to plan future workforce requirements by viewing aggregated information about practice staffing levels, vacancies, trainees, and upcoming retirements.

2. Modules

2.1. Data import

The tool is based on national data for average number of consultations for each demographic band, trends in consultation rates in General Practice 2008/2009 (which we have updated to reflect the average 3.3% annual increase in activity since then) and the percentages of these consultations which could be provided by other healthcare professionals. This data is used to calculate the estimated number of consultations which could be undertaken by these staff. The demographics, workforce and salary data are taken directly from the NHS portal. The data can be updated subsequently for each practice, CCG or PCN.

2.2. Workforce Substitution Calculator

The Workforce Substitution Calculator calculates the number of GP consultations which might be undertaken by non-GP staff. It then calculates the number of GP hours could be substituted and the workforce required for this. It presents the results as both sessions and Full Time Equivalent (FTE).
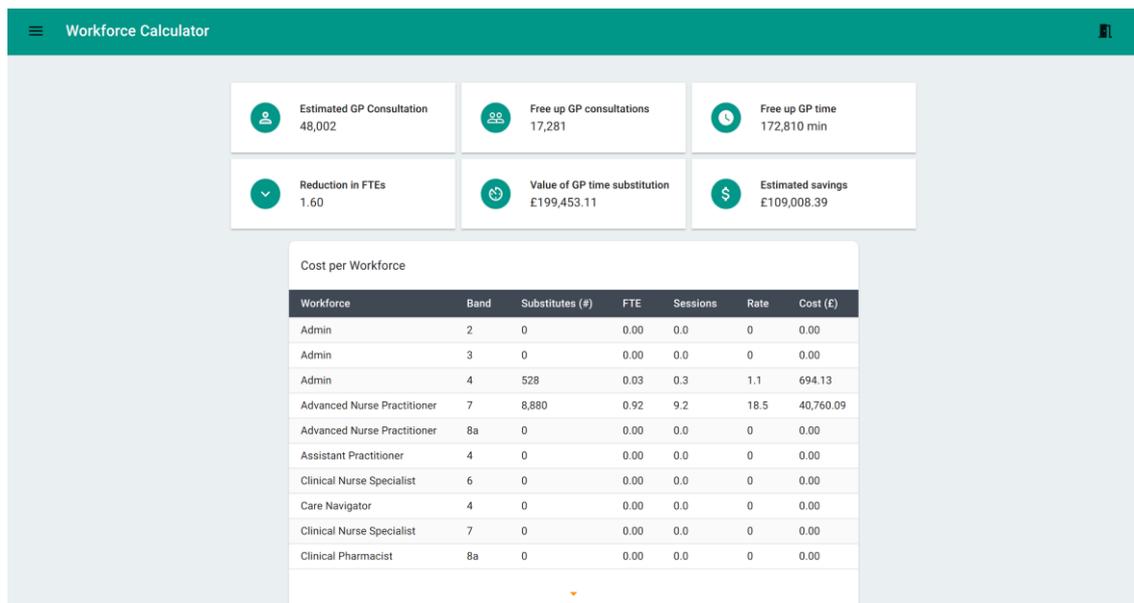
Workforce calculator results for a practice showing the total number of GP consultations, the number of consultations and corresponding time that can be freed up using alternative staff, and the corresponding estimated cost savings.

How it works

Based on the demographics of the population served, the tool determines the potential number of GP consultations per year for the specific practice. This uses GP consultation utilisation rates (average numbers of appointments per sex/age band per year) which are taken from national data. The estimates of the potential number of GP consultations which could be substituted by non-GP professionals are based on the results of a recent survey undertaken by Wessex GPs, where 4,300 consultations were reviewed in real-time to determine whether another professional could have seen that patient. Appointment time requirements are based on evidence from existing pilots. The substituted value of GP

consultations by non-GP professionals is derived from the mid-point of the relevant Agenda for Change pay band, plus on-costs, for the individual staff category.

The population demographics, utilisation rates, substitution rates, appointment durations, salaries, and appointment locations (i.e. home, online, phone, surgery) can all be edited with local data where available.

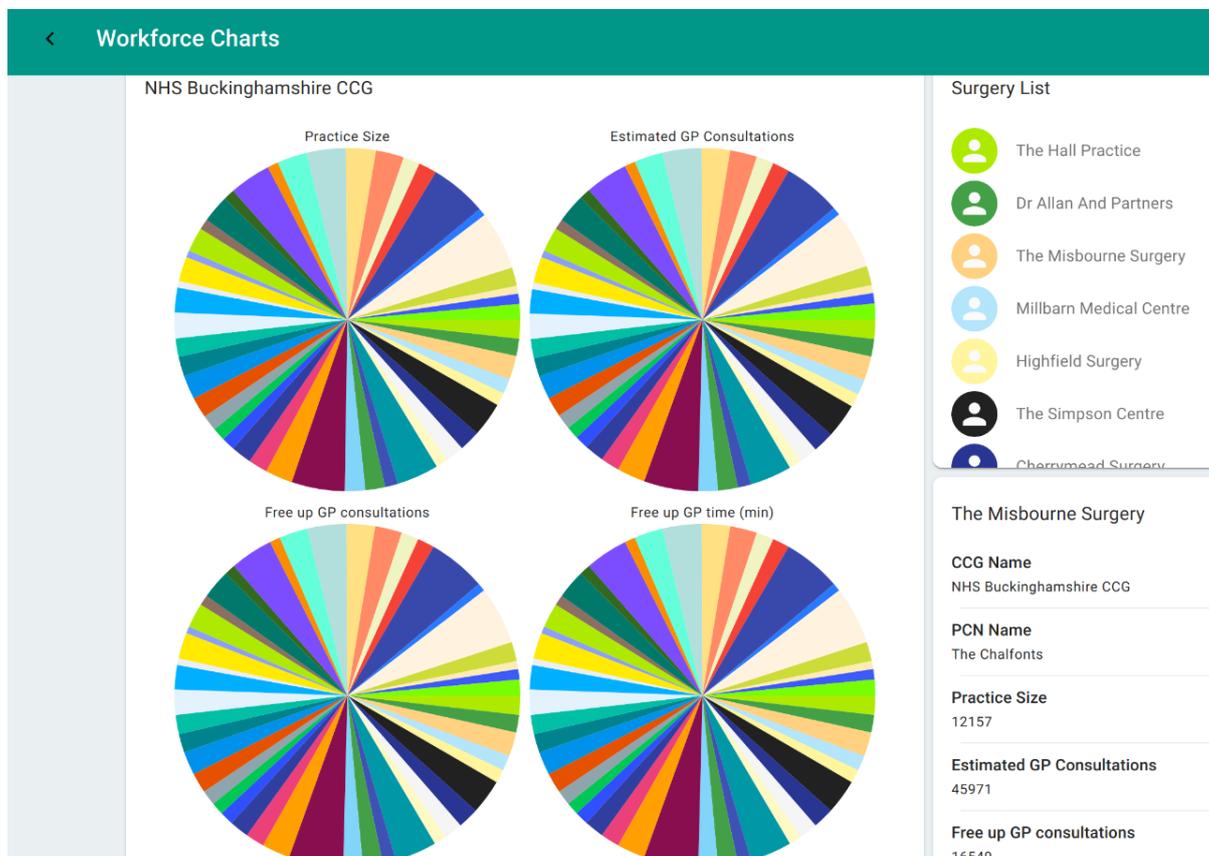Average costs for employment are also provided. Indemnity costs are not included.

The tool focuses on GP consultations in surgeries only (excluding home visits, phone, or online consultations). All calculations are based on GP partners and face-to-face consultations, excluding other activities e.g. administration.

The calculator is based on the below datasets:

1. [Trends in consultation rates in General Practice 2008/2009](#)
2. [The King's Fund, Understanding pressure in general practice, May 2016](#)
3. [Agenda for Change pay scales 2017/18.](#)
4. [PRUComm, 8th National GP Worklife Survey, 2015](#)
5. [Sickness Absence Rates in the NHS](#)

CCG and PCN Views

Aggregated information about the potential for workforce substitution can be view at both PCN and CCG level.

Aggregated Workforce Substitution data.

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2.3. Skills Calculator

GPs perform a wide range of functions, some of which have been delegated to Practice Nurses and some of those, more recently, to Health Care Assistants. A number of tasks undertaken by GPs could also be managed by the wider workforce (e.g., pharmacists, physiotherapists and physician associates).

The skills calculator tool supports the identification of staff that can undertake a selected set of tasks. By selecting the skills and adding them to the 'Gladstone Bag', the tool will return a list of potential staff who can perform all the skills selected.

The tool will provide a nil return in the event that there is no one professional who can undertake all the skills selected – in this case, it is only the GP who can undertake this particular combination of tasks/skills.
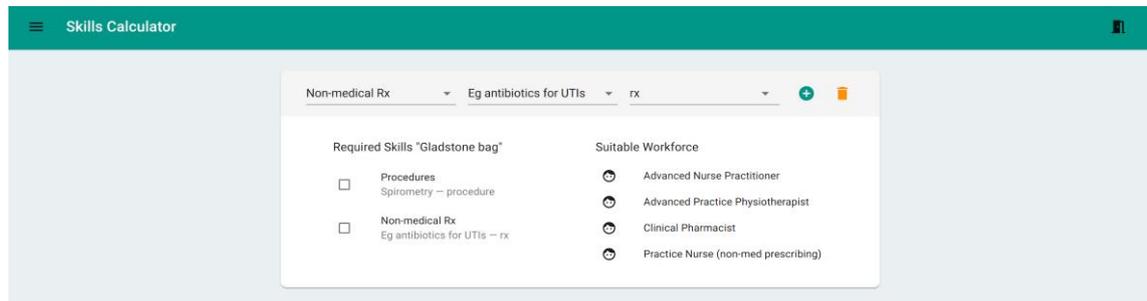
Skills calculator results for condition/function combinations that shows the potential substitution workforce.

By combining all the skills in a single 'Gladstone Bag' the tool will output all the workforce that undertake these skills. Replacing the GP with one of the staff from the list the practice as a result will be able to reduce its operating costs and allocate more time for the patient.

2.4. Workforce Planning

Workforce Planning allows aggregated workforce information to be viewed at a CCG or PCN level. It combines information about upcoming retirements, vacancy levels and trainees to support examination of future workforce requirements.

Succession Planning

The Age and Sessions RAG Rating (RAG) editor supports succession-planning for the general practice workforce.

This tool highlights (Red-Amber-Green) staff aged 50 to 60. It assumes retirement at age 60 (based on current average retirement ages for GPs and Practice Nurses) and defaults session numbers to nil from that age. It also highlights any discrepancy - positive or negative - in session numbers in years 2 and 5, compared with 'Now', and allows session numbers to be varied for planning purposes.

RAG Rating Workforce Editor

Name	Surname	Workforce	Now		Year II			Year V		
			Age	Sessions	Age	Projected Sessions	Planned Sessions	Age	Projected Sessions	Planned Sessions
☐ Fred	Jones	GP Salaried	38	10	40	10	10	43	10	8
☐ Helen	Smith	GP Partner	42	10	44	10	5	47	5	8
☐ George	Brown	Advanced Nurse Practitioner	52	5	54	5	5	57	5	5
		Total sessions/wk		25		25	20		20	21
		Shortfall from now				0	5		5	4
		Shortfall from now (%)				0%	20%		20%	16%

RAG Editor showing the projected numbers of sessions in future years and shortfall from now.

Vacancies Editor

The vacancies editor uses national NHS data to estimate the number of FTEs for each workforce staff type in each practice. The data can be edited at practice level and allows saving the number of trainee placements and their remaining time.

Vacancies Editor

Workforce	Head Count	FTEs	Weekly Hours	Vacancies (in FTEs)	Reduction (weekly hours)		Trainees Placement (months)	
					II Years	V Years	Duration	Remaining Time
Admin/Non-clinical Apprentice	0	0.0	0	1.00	0	0	0	0
Admin/Non-clinical Other	0	0.0	0	0.0	0	0	0	0
Advanced Nurse Practitioner	2	1.12	42	0.0	42	35	0	0
Apprentice - Health Care Assistants	0	0.0	0	0.0	0	0	24	6
Apprentice - Other	0	0.0	0	0.0	0	0	0	0
Apprentice - Pharmacists	0	0.0	0	0.0	0	0	0	0
Apprentice - Phlebotomists	0	0.0	0	0.0	0	0	0	0
Apprentice - Physiotherapists	0	0.0	0	0.0	0	0	0	0
Care Coordinator	1	0.50	20	0.0	20	20	0	0
Community Paramedic	0	0.0	0	0.0	0	0	0	0
Dietician	0	0.0	0	0.0	0	0	0	0
Dispensers	3	1.81	50	0.0	50	40	0	0

The table highlights the number of staff and FTE for each workforce type in a practice, highlighted in green.

Workforce Reports

The workforce reports show aggregated workforce data for each practice in a CCG or PCN for both the workforce substitution calculator and general workforce planning. It allows an overview of the total headcount, FTE, vacancies, trainees and retirement information for the whole CCG or PCN.

‹ Vacancies Reports

NHS Buckinghamshire CCG

Surgery Name	Total Head Count	Total FTEs	Total Weekly Hours	Total Vacancies	Total II Years	Total V Years	Total Duration	Total Remaining Time
Amersham Health Centre	35	21.72	0	0.0	0	0	0	0
Ashcroft Surgery	22	10.54	112	1.00	112	95	24	0
Berryfields Medical Centre	17	13.09	0	0.0	0	0	0	0
Bourne End & Wooburn Green Medical Ctr	31	20.42	0	0.0	0	0	0	0
Burnham Health Centre	63	48.04	0	0.0	0	0	0	0
Carrington House Surgery	20	13.76	0	0.0	0	0	0	0
Cherrymead Surgery	25	18.17	0	0.0	0	0	0	0

Aggregated workforce report

3. Background

The Primary Care Workforce Tool has been built from the ground up in partnership Wessex AHSN. The features have been developed from requirements requested by CCGs, PCNs and GP Practices address problems and issues faced by both senior management and staff on the ground.

Nquiringminds is a British company specialising in Smart Cities, Secure IOT, and AI Analytics. Established in 2010, our solutions focus on digital transformation, using our expertise in IoT and data analytics to unlock efficiency and cost savings. We have won multiple awards for our work.

4.Further Details

If you are interested to learn more about the Primary Care Workforce Tool, please do get in touch. We would be happy to talk in more detail or provide a demonstration account so that you can explore the features described in this document.

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