– DATA COLLECTION PROCESS IN THE ENGLISH PLANNING SYSTEM

Reference information

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Main aspects:

- *A wide range of demand and supply data and information is collected regularly for analysis as part for workforce planning within England;*

- *England has invested in the NHS Electronic Staff Record and it is a principal resource for workforce information;*

- *The Workforce Information Architecture project mapped and profiled over 100 sources of data and information relevant to health and social care workforce planning;*

- *Implementation of a national human resource (HR) and payroll system, standardisation of data and the development of a suite of national and local reports are key successes in the English planning system.*

Description of the activities:

Effective workforce planning is a challenge in healthcare due to a complex mix of workforces (with specific training pipelines and distinct functions), the large geographic area that is covered and the changing policies that influence the supply and demand of care. To add to this complexity, the healthcare workforce in England is large. As of September 2012, there were 1,358,295 staff in the NHS Workforce (HSCIC, 2013c).

Workforce planning is made more difficult by complicated training career pathways. There are many routes through training, different flows and transitions between these routes, and migration in and out of England and the UK. Behaviours of the workforce (in terms of, for example, attrition and retirement) also vary by age, gender and profession. The long timescales for training make it hard to measure the impact of policy changes and to make corrections. The inertia, delays and complex influences in the system mean that data needs and modelling is complicated. In addition there are the complexities of estimating the requirements of the future health needs of the population.

The risks of poor workforce planning ultimately reflect on the health of populations, with potential consequences such as reductions in the health outcomes which may have been achieved, or the opportunity cost caused by the potential need to spend large sums of money to correct sub-optimal systems. To mitigate these risks it is important to have clear governance, methods and approaches suitable for workforce planning that can deal with and process complexity and uncertainty. These approaches must enable the development of robust evidence based intelligence (attained by considered analysis and access to optimal data and information) that includes thinking about key challenges and the future systematically.

The health workforce planning system within England has clear accountabilities set out to assist clarity and understanding of responsibilities. The Department of Health has the overall purpose and aim as described below including how legislation requires workforce data:

"The Department of Health (DH) helps people to live better for longer. We lead, shape and fund health and care in England, making sure people have the support, care and treatment they need, with the compassion, respect and dignity they deserve." (DH, 2014)

The Health and Social Care Act 2012 places a duty on all organisations that deliver NHS-funded care to provide data on their current workforce and to share their anticipated future workforce needs (DH, 2013).

Health workforce planning takes place at a number of levels in England and is organised within an overall framework of statutory relations between the DH and Health Education England (HEE)

(for more details on English system organisation please see good practice on organisation "Call for evidence" and the process of "triangulation" in the English planning system")

A wide range of demand and supply data and information is collected regularly for analysis as part for workforce planning within England. When identifying data for workforce planning it is important to obtain the right level of granularity of information that is ideally aligned to the way education and training is commissioned.

'The Department of Health (DH) and Health Education England (HEE) share a vision of planning for future workforce needs and securing funding for education and training

that is underpinned by accurate, comprehensive, complete and timely workforce information, to ensure the workforce truly reflects the needs of local service users. This will meet the needs of patients, and providers, and commissioners of healthcare.' (DH, 2013)

England has invested in the NHS Electronic Staff Record and it is a principal resource for workforce information. The data is collected locally by NHS organisations as part of established governance and mandatory reporting processes. The Health and Social Care Information Centre (HSCIC) manages this overall resource, performs validation and conducts analysis acting as 'the single central source and repository of published workforce information' (DH, 2013).

'The key successes of workforce planning identified in the UK include: implementation of a national human resource (HR) and payroll system which has improved the consistency, accuracy, quality and completeness of workforce statistics; led to greater standardisation of data; and the development of a suite of national and local reports and other tools to facilitate benchmarking' (European Commission, 2012).

Nationally within England there have also been initiatives such as the Workforce Information Architecture project that mapped and profiled over 100 sources of data and information relevant to health and social care workforce planning. The output of this initiative produced a comprehensive map of the information and data sources as shown below.

Workforce planning and development information architecture

http://www.cfwi.org.uk/intelligence/projects/information-architecture-1/files/information-architecture-map

As part of national workforce planning reviews presenting back intelligence, the data source, variable, quality and assumptions are stated. Examples of supply and demand variables for a strategic review of the pharmacy workforce (CfWI, 2013c), as commissioned by DH and HEE are shown below.

VARIABLE	DATA QUALITY	SOURCE	NOTES
ANNUAL INTAKE OF HOME AND EU STUDENTS TO MPHARM COURSES IN ENGLAND AGE PROFILE	M	GPHC PHARMACY STUDENT ANALYSIS 2009/10 PHARMACEUTICAL JOURNAL DATA ACQUIRED VIA FREEDOM OF INFORMATION (FOI) REQUEST FOR ARTICLE: "STUDENT TRENDS MAY HAVE IMPLICATIONS FOR THE FUTURE OF THE PROFESSION" (BASSEY, 2012)	THE PHARMACY STUDENT ANALYSIS 2009/10 REPORT PROVIDED THE 2009/10 MPHARM INTAKE TO ENGLISH SCHOOLS OF PHARMACY SPLIT BETWEEN HOME/EU AND NON EU, AS WELL AS MALE AND FEMALE. IT ALSO PROVIDES THE INTAKE PRIOR TO THIS BUT NOT SPLIT AND DOMICILE SPLIT GOING BACK TO 2005 IN ORDER TO INITIALISE THE PHARMACY MODEL DEVELOPED. DATA USED IN AN ARTICLE FOR THE PHARMACEUTICAL JOURNAL (BASSEY, 2012) CONTAINING THE INTAKE TO ENGLISH SCHOOL OF PHARMACY IN 2011/12. THE SAME DOMICILE AND GENDER SPLITS WERE USED AS PREVIOUSLY. FOR 2010/11 VALUES, THE CFWL TRENDED BETWEEN THE TWO SOURCES AND TOOK THE MIDPOINT.
ANNUAL INTAKE OF HOME AND EU STUDENTS TO MPHARM COURSES IN ENGLAND AGE PROFILE	VH	HESA STUDENT DATA	AS TOTAL MPHARM INTAKE NUMBERS FROM OTHER SOURCES DID NOT PROVIDE THE AGES OF STUDENTS, THE AGE PROFILE WAS CALCULATED FROM HESA STUDENT DATA
FUTURE POPULATION PROJECTIONS	VH	OFFICE FOR NATIONAL STATISTICS (ONS) NATIONAL POPULATION PROJECTIONS, 2010-BASED PROJECTIONS.	THE CFWL USED THE ONS POPULATION PROJECTION TO HELP ESTIMATE THE CHANGE IN DEMAND FOR PHARMACIST DUE TO THE CHANGING POPULATION SIZE.
FCE DATA	H	THE HEALTH AND SOCIAL CARE INFORMATION CENTRE, HOSPITAL EPISODE STATISTICS FOR ENGLAND INPATIENT STATISTICS, 2011-12.	FINISHED CONSULTANT EPISODES DATA WAS USED TO HELP WEIGHT THE DEMAND FOR PHARMACISTS' SERVICES IN HOSPITAL SETTING.

Overall for the UK, *'each system collects workforce data based on headcounts (full time/whole time equivalent), staff groups (disaggregated according to sex, age and ethnicity), role count, basic/total earnings, absence and turnover. Data are also available on the numbers of temporary staff and numbers on fixed term contracts. Data on General Practitioners (GP), and some practice staff who are not directly employed by the NHS, are collected by separate systems in England, Wales and Scotland. Gaps still remain, for example, in England on other staff employed by local authorities, the private and third party providers of NHS services'* (European Commission, 2012).

'Both FTE and headcount are modeled by specialty/profession, age and gender. All supply modeling takes account of the numbers entering training, attrition rates and delays during each stage of training (which vary by specialty/profession), and entry

to the workforce. Workforce modeling includes leavers, returners, retirement profiles and exits, again by specialty/profession. Where information is available we model gender as well as age, and participation rate (ratio of full to part-time working) which varies between specialty/profession, age band and staff type.' (OECD, 2013)

Demand modeling at present considers factors including population growth rate, the likely gap between demand and need, and expert opinion concerning the workforce necessary to meet future requirements.

Helpful tips:

When identifying data for workforce planning it is important to obtain the right level of granularity of information that is ideally aligned to the way education and training is commissioned;

Greater standardisation of data is a key factor of success;

The development of a suite of national and local reports and other tools facilitates benchmarking (European Commission);

Further information:

- **Department of Health** *(2013) Workforce Information Architecture in the Reformed NHS Landscape*

- **Centre for Workforce Intelligence** *(2010) Review of Information Architecture Http://*www.cfwi.org.uk/intelligence/projects/information-architecture-1

- **Centre for Workforce Intelligence** *(2014a) Robust workforce planning: Update from practice* http://www.cfwi.org.uk/publications/robust-workforce-planning-framework-update-from-practice/attachment.pdf

- **OECD** *Study - Ono, T., G. Lafortune and M. Schoenstein (2013), "Health Workforce Planning in OECD Countries: A Review of 26 Projection Models from 18 Countries", OECD Health Working Papers, No. 62, OECD Publishing. doi:* 10.1787/5k44t787zcwb-en

- **Department of Health** *(2014) About us / What we do* https://www.gov.uk/government/organisations/department-of-health/about

- **Department of Health** *(2013) Helping people live better for longer: A guide to the Department of Health's role and purpose post-April 2013* https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/226838/DH_Brochure_WEB.pdf

- **Department of Health**, *(2014) A mandate from the government to Health Education England.* https://www.gov.uk/government/publications/health-education-england-mandate-april-2014-to-march-2015

- **Department of Health** *(2013) Education outcomes framework for healthcare workforce.* https://www.gov.uk/government/publications/education-outcomes-framework-for-healthcare-workforce

- **Department of Health** *(2013) Education Outcomes Framework Indicators - Technical Guidance 2013/14.* *https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/225361/EOF_Indicators_-_Technical_Guidance_2013_14.pdf*

- **Department of Health** *(2012) Liberating the NHS: Developing the healthcare workforce – from design to delivery.*

- *https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/152168/dh_132087.pdf*

- **European Commission** *(2012) EU-level Collaboration on Forecasting Health Workforce Needs, Workforce Planning and Health Workforce Trends – A Feasibility Study.* *http://ec.europa.eu/health/workforce/docs/health_workforce_study_2012_report_en.pdf*

- **Health Education England** *(2013) HEE's national Workforce Plan* *http://hee.nhs.uk/wp-content/uploads/sites/321/2013/12/Workforce-plan-UPDATE-interactive.pdf*

- **Health Education England** *(2014) HEE's Annual Report and Accounts 2013/14* *http://hee.nhs.uk/wp-content/blogs.dir/321/files/2014/07/HEE-Annual-Report-and-Accounts-2013-14-interactive.pdf*

- **Centre for Workforce Intelligence** *(2012) A strategic review of the future healthcare workforce.* *http://www.cfwi.org.uk/publications/a-strategic-review-of-the-future-healthcare-workforce-informing-medical-and-dental-student-intakes-1*

- **Centre for Workforce Intelligence** *(2013a) Future Nursing Workforce Projections.* *http://www.cfwi.org.uk/news/publications/future-nursing-workforce-projections-starting%20the%20discussion*

- **Centre for Workforce Intelligence** *(2013b) Future Midwifery Workforce Projections.* *http://www.cfwi.org.uk/news/publications/future-midwifery-workforce-projections-starting-the-discussion*

- **Centre for Workforce Intelligence** *(2013c) A strategic review of the future pharmacist workforce.* *http://www.cfwi.org.uk/publications/a-strategic-review-of-the-future-pharmacist-workforce/@@publication-detail*

- **Centre for Workforce Intelligence** *(2013d) A strategic review of the future dentistry workforce: Informing dental student intakes.* *http://www.cfwi.org.uk/publications/a-strategic-review-of-the-future-dentistry-workforce-informing-dental-student-intakes*

- **Centre for Workforce Intelligence** *(2014) Horizon 2035: Health and care workforce futures progress update.* *http://www.horizonscanning.org.uk/publications/h2035-progress-update/*