



Office for Health
Improvement
& Disparities

Building public health intelligence capability and capacity

Dr John Battersby

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Context

National Public Health Intelligence System

2001

2013

2021

Public Health Observatories

Public Health England

Office for Health Improvement and Disparities

Excel

Coding - R

Advanced data science

Local Public Health Intelligence System

Health Authorities/
Primary Care Trusts

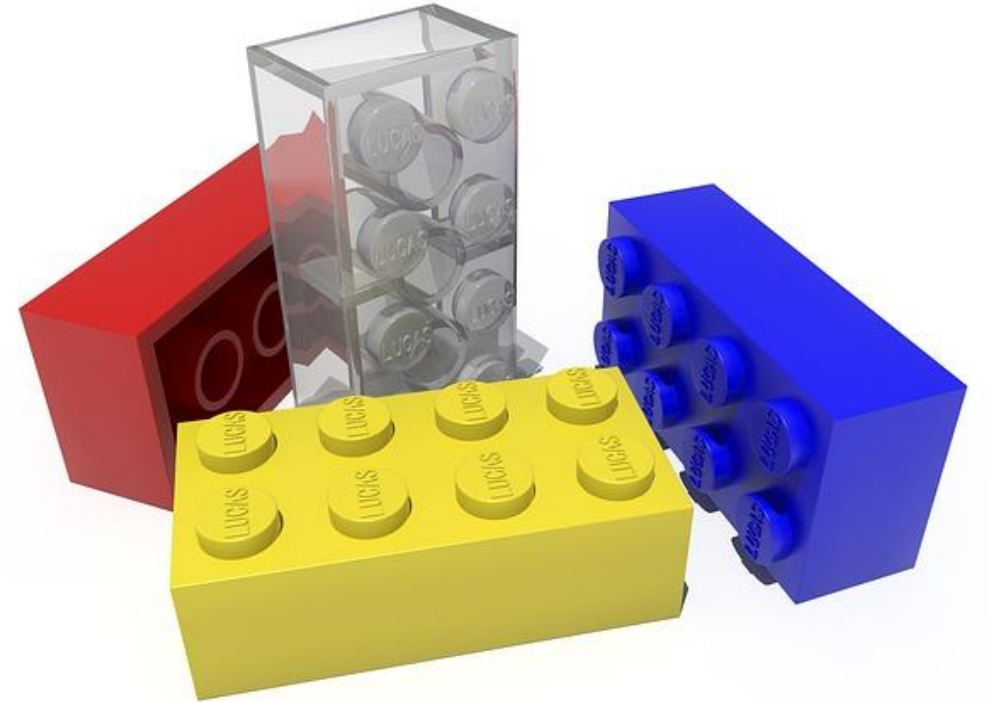
Local Government

Local Government/
Integrated Care
Systems



The building blocks

- Professionalisation
- Career pathways
- Structured training opportunities
- Evidence based approach to learning



Professional registration



**Association of Professional
Healthcare Analysts (AphA)**

<https://www.aphanalysts.org/>

- “New” registration scheme for analysts
- Linked to existing (FedIP) scheme
- Portfolio approach
- [Five levels](#)
- Requirement for CPD

Career pathways



National Competency Framework for Data Professionals in Health and Care

Competency Framework Booklet



Data Analysis Competencies Practitioner

Competency	Practitioner (L2)
Indicative Level	Bands 5/6 (e.g. Data Analyst / Information Officer)
C1 Analyse data for information and/or performance measurement within the context of the relevant health and care environment	You apply a range of techniques to transform data into valid and purposeful information. You can reverse-engineer existing analyses and replicate the method and results. You understand the business context and how the results of analysis will be perceived. You participate in discussions determining which performance measures are appropriate and can turn business needs and goals into performance measures.
C2 Employ applicable data sources to produce valid, verifiable and replicable analyses	You can extract data from multiple sources for your work and can identify if the data is accurate and fit for purpose. You can identify a broad range of data quality issues and perform data cleansing and consistency checks. You understand the limitations of the systems, both human and digital, from which the data arises and incorporate summary statistics to clarify the meaning of the data and variations within it. You review and update analysis production methods and documentation following any changes to data, processing or requirements and employ quality assurance techniques to ensure the validity of the results. You identify problems arising from databases and processes and seek out remedies and preventative measures. You plan ahead for further iterations of any analysis. You apply data governance requirements, anonymisation protocols and follow all data security procedures as mandated.
C3 Apply relevant software and numeracy skills with a range of analytical techniques	You are numerate, computer literate and data literate. You have knowledge of explicative statistical skills. You have a good knowledge of relevant tools, applications and systems used in your organisation. You know how and when to apply further explicative statistical skills. You can adopt the most appropriate tool for the tasks. You ensure work is completed to a high standard. You engage with your team and the wider analytical community to learn about new tools and techniques.
C4 Deploy problem-solving skills to define requirements for analytical work	You are able to make use of appropriate information to help you analyse a range of common types of problem. You are able to employ a number of problem solving techniques (e.g. root cause analysis) to identify the reason for unexpected problems with routines, and utilise a range of skills to solve these. You work with the requestor of the analysis to understand the underlying question and apply your knowledge to plan the preferred approach to the analysis.
C5 Generate and communicate insight verbally, visually and in writing to a variety of information consumers	You understand and can utilise the appropriate media to communicate findings. You shape communications relevant to the audience and their requirements using appropriate language and with awareness of bias and possible issues with commonly misunderstood terms. You present analysis with visualisations to give clear messages. You can translate technical concepts to a non-technical audience and are comfortable presenting appropriate recommendations.
C6 Engage in continuous skills development, exhibit professionalism and seek out and share emerging best practice	You are able to identify and complete tasks within your field of expertise whilst undertaking work and projects allocated by senior staff, documenting your competence and learning in a professional body of work. You will seek out development opportunities for you to learn both as an individual and as a team, sharing your knowledge with your peers, whilst building people skills into all aspects of your daily routine. You will promote the relevant professional values at all times and demonstrate compassion for yourself and colleagues.

User Profile #2

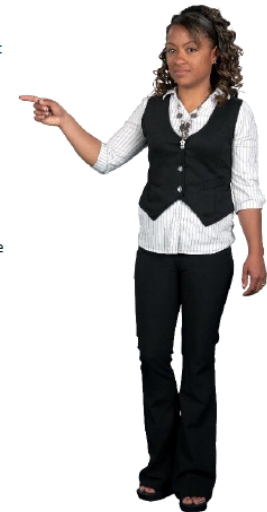
Sandra is a relatively new in post Head of Analysis for an established mental health Trust in the North West. She needs to recruit an Analyst who has robust skills in reporting on the Mental Health Service Data Set (MHSDS). She has been informed by HR that, in the interests of equal opportunity, she must develop the job description and advert from a competency framework that is recognised by the NHS.

Her experience with frameworks that she had used previously was either that they were too generic and didn't allow her to focus on the relevant skills or were built by particular organisations where no-one outside that organisation could have reasonably built up those skills.



As a member of AphA, she was introduced to the National Competency Framework for Data in Health and Care (NCH 4 DHC). As she read the booklet, she discovered that she could supplement the core competencies with specialisms and even something called domains. She was therefore able to insist applicants have specialist skills in "descriptive and explicative analytics" from within the domain of mental health services with MHSDS as a preference.

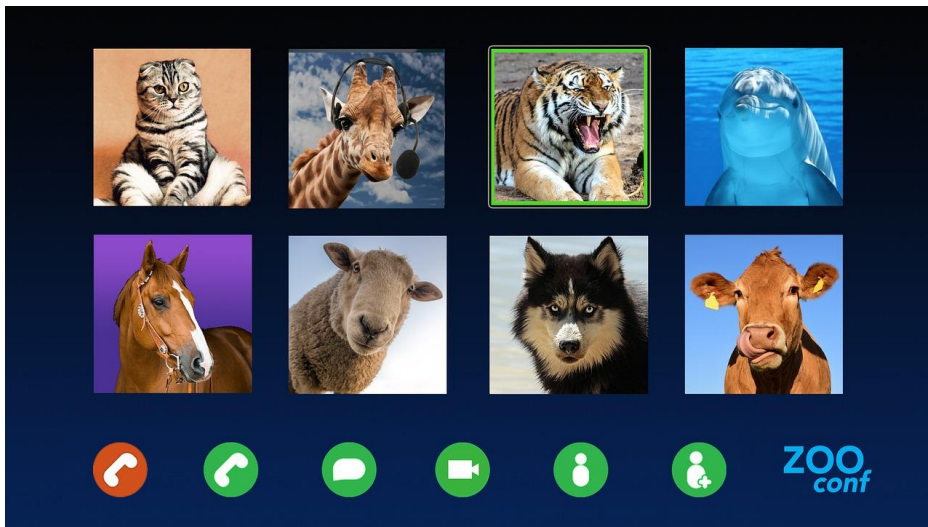
Her support within HR approved the advert first time and, after shortlisting a number of applications, Sandra was able to successfully recruit to the role.



Structured training opportunities

Public Health England / OHID courses

- National offer
- Targeted at public health analysts
- Online delivery since 2020



Online learning

- Public health intelligence – 2 modules
- Population Health Management – 8 modules
- MOOCs

Formal degree courses

- Proliferation of courses in last 3-5 years

Apprenticeships



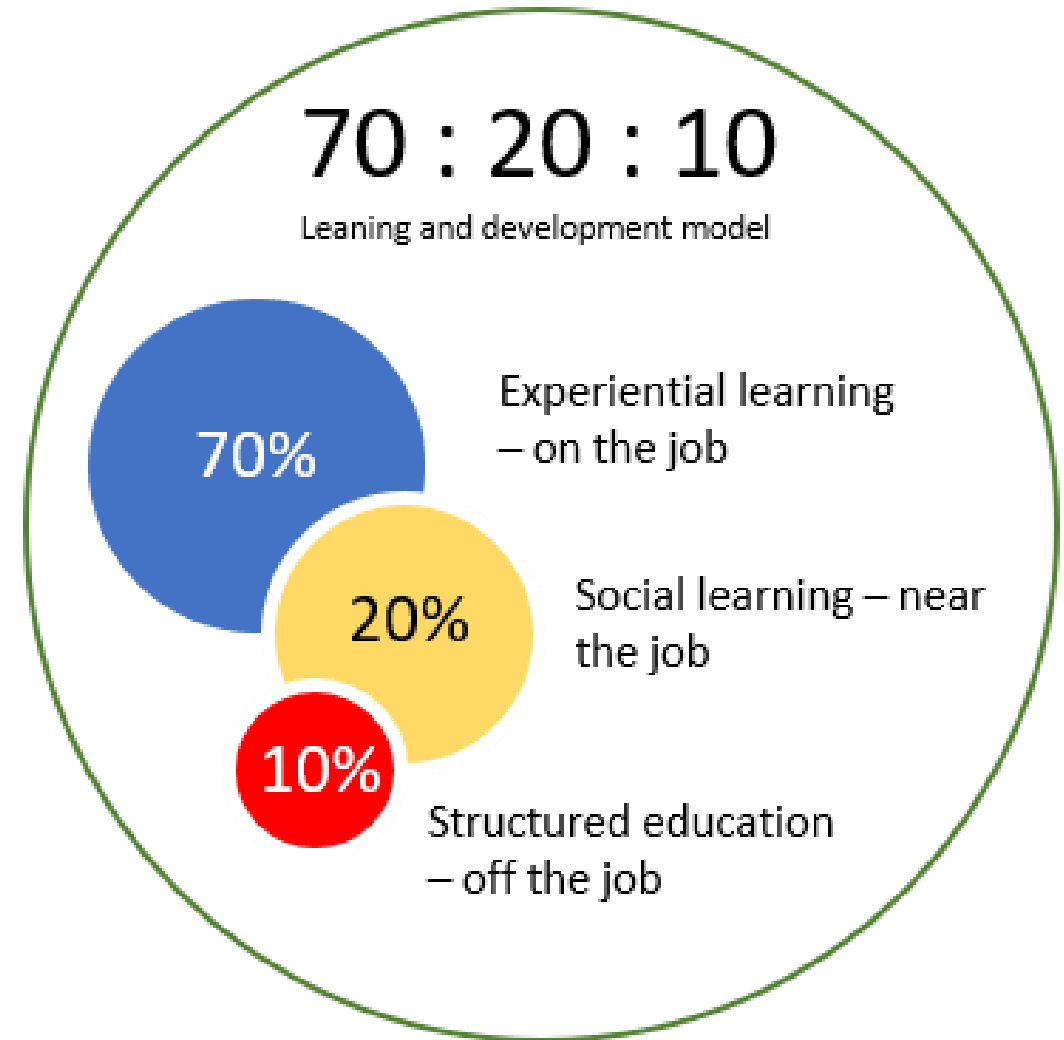
- Available up to master's level
- Fully funded
- 80:20 work-based : off the job
- Open to existing staff

Examples:

- [Data analyst – level 4](#)
- [Data scientist – degree](#)
- [Applied data scientist – masters](#)
- [Health and Care Intelligence Specialist - masters](#)

Evidence based approach to learning

- There is an evidence base for learning!
- Learning environment
 - Role modelling by seniors
 - Dedicated time
 - Learning networks / CoP
 - Use relevant tools e.g. Slack
 - Regular staff webinars



Thank you!

Dr John Battersby

John.Battersby@dhsc.gov.uk