



FOCUS ON: Jane Johnston

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What are the key qualities a person needs to become a CAO?

A chief analytical officer first and foremost needs to have an analytical background in order to understand the complexities of data and data flows to support data modelling, AI and predictive analytics as well as everyday business intelligence functions. They also need to have a business acumen to drive for value, balanced with their technical and analytical skills. They need to manage strategically and don't necessarily need to have the most up-to-date data science skills, but must have an understanding of the need for these skills within their teams, and how they are utilised and developed to meet ever changing demands and directions, both nationally and locally. Communication skills are also very important to enable them to influence systems to invest in data and analytics. Whether talking to digital, finance, operational or clinical colleagues, they need to be able to portray and emphasise the importance to whichever audience they are faced with.

Why is this role important now and in the future?

Many organisations in health and care have CIO's, Chief Information Officers. The perception of those not fully involved in the world of analytics is that the CIO's are fully representative of the analytical profession and their direction. However, increasingly these roles are more involved with the digital side such as EPRs, virtual wards, new tech etc. Although data and digital are intrinsically linked, there needs to be a clear distinction between the digital side and the data/analytics side. Without the input from a lead in analytics, many high cost ventures are bought into without consideration of the ability of the analyst to access timely and relevant data to provide the insights that intelligence needed to understand specific needs, explore gaps in care and address inequalities. Having a champion with influence at board level will not only help prevent sub-optimal procurement, but will enable advancement of data science skills and improved evaluation of new models of care.

What are the key recruitment issues for a CAO over the next 5 years?

Historically, analytical teams in health and care have mainly been reporting on what has already happened and providing trends for what we know will happen such as winter pressures. This doesn't help alleviate the strain on the system, the only way to do that is to start using more predictive analytics and looking at prevention rather than admission avoidance. In order to stop the exacerbation and deterioration of health, we need to move towards approaches such as use of AI and start uncovering the issues we don't yet know about.

For the CAO, in recruitment there is already a large pool of analysts with excellent knowledge of healthcare and pathways with excel, VBA, or SQL skills, but not the scientific skills needed for AI, or they have a pool of data scientists who are expert at Python, but have no concept of how healthcare works. One solution is for the CAO to focus more on retention of staff. By doing a full cross system analysis of analytical and data scientific skills, they can build a core team to support cross system intelligence whilst developing understanding of the longitudinal pathway across all disciplines and how each part of the system impacts their own.

Then using the national competency framework and organisations like Apha to support the analysts to focus on career progression and development with a clear direction where to improve and build on their skills, whether it be developing data science skills, or understanding of healthcare data and pathways.

Such an approach will also build a more satisfied workforce with clear pathways for promotion and advancement whilst being fully supported in achieving their goals.