



AphA Analysts' Monthly Magazine



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September 2019 Issue 33

Annual Conference and AphA Awards Manchester 2019 #aphaconf2019



“Data, Data, Data”

You heard it here! Manchester #aphaconf2019

Welcome to our Annual Conference and Awards special edition

Well wasn't it a super event!

Manchester 2019 will be remembered for many reasons.

A video address from the Secretary of State for Health and Social Care,

To be recognised in this way by the Secretary of State is important and ground-breaking

Issue 33

Matthew Gould left us with a few key messages and both he and James Freed were on board with the AphA message regarding professionalisation of our workforce.

We feature each of the award winners and will be visiting them in coming months.

We cover each of the speaker's presentations and

delegates provided us with great feedback to help shape our business plan and future plans for the website, magazine and for branch leads planning events.

Finally, thank you to our sponsors, and to all of those that presented at the conference without whom the event would not have been possible.

We hope to see you at an AphA event soon, and at the Annual Conference in 2020

SUPPORTED BY -



The Association of Professional Healthcare Analysts CIC is in part supported by the Health Foundation. The Health Foundation is an independent charity committed to bringing about better health and health care for people in the UK.

Day 1 AphA Conference 2019

Paul Stroner, AphA CEO opened the conference welcoming delegates to Manchester for the biggest and best AphA Annual Conference yet.

Paul's opening address updated the Conference on AphA developments in the last 12 months including :

- o Professionalism – launch of the 100 in 100 days campaign - it closed in 49 days and we are now assessing the '100'.
- o Working with Health Education England (HEE) and Building Digital Ready Workforce (BDRW) to look at categorisation of the workforce.
- o Training – focussed offer has been mixed in terms of success. Some courses have sold out, others have not and have needed to be cancelled. What would work better? Should AphA only sign post rather than offer training?



Paul also used this session to launch:

NHS-R – train the trainer course; strategic partnership between AphA and NHS-R Community. This will be free to AphA members. The train the trainer programme will be open to 22 delegates, 2 analysts from each AphA branch, with a requirement then to deliver 3 one day introductions to R, over 3 years to 10 analysts per workshop.

Two packed days followed..... with a theme '**PROFESSIONALISM**'.



Martin Pitt AphA President delivered his first AphA President's address.

Martin is delighted to be involved in AphA and highlighted that AphA is '**really going places**' and that there is '**so much happening**'.

Quality of what AphA is doing is increasing and that it is a '**good time to be engaged**'.

To quote Martin:

"our time has come"



Video Address to the Conference by Matt Hancock, Secretary of State for Health & Social Care



The conference delegates heard from the highest profile speaker ever at an AphA Conference. It was clear that Matt Hancock genuinely believes in the AphA agenda. In this article we will highlight a few of his quotes from a very interesting address.

“I care deeply about the analysts”... “we need to learn from things that are going well.”

“Data, Data, Data” - yes, we heard this at #aphaconf2019!

“Rely on people like you to realise my vision to make long term plan a success”

“Analysts turn up every day to analyse what works and help make it happen” and will be crucial with the move to Population Health Management to recognise trends and patterns.

For analysts in health and social care this is an ***“exciting time”***.

“Need more analytical influence at board level”.

“Budget and £’s need to be behind where the analysts show us” - we need to deliver better prevention and lower admissions to hospital and ultimately ***“use information and data to inform decision making”***.

“100 pledges is an exciting step” and ***“I fully support the recognition”***.

“A great big thank you for all you do to improve peoples lives”

Keynote Speaker, James Freed, Chief Information Office Health Education England—*The profession we deserve*

James Freed was yet another influential, high profile speaker at #aphaconf2019. James described a personal journey, which was insightful but also posed some challenges to the conference attendees. James fully embraces the professionalism agenda and acknowledges that we need to make this happen.

James highlighted that we **learn more from failure than success**, indeed his daughter commented – ‘**when we fail our brains grow**’. Certainly one of the take home messages from the conference, we are too often afraid of making mistakes and consequences. But to consider it as learning and development is so refreshing!



We heard that one of the biggest constraining factors to developing our profession is human adaptability; it does not increase at the same rate as technology.

We were challenged:

- o *Do I have the thirst to learn?*
- o *Do I feel enabled to make change?*
- o *Culture – does my organisation let me do that; we are so often risk averse and hierarchical;*

James then discussed 3 of his own perspectives regarding professionalising the workforce:

- o Having national responsibility,
- o I am an informatician; his own needs and wants,
- o As an employer running a team,

But we do need improved data about workforce to predict future demand of the analytical workforce.

However, **the perception of ‘the profession’ is changing**. Aasha Cowey’s survey work was highlighted– AphA members were biggest contributor to the survey, and may have skewed the data (we featured an article from Aasha in the last magazine and will do again in a future edition).

From the employer perspective what is needed?

- o Recruit high calibre people that can deliver the job;
- o Tools to create a better working environment;
- o Retain staff and have happy staff.



Developing Analysts across Health & Social Care

Anna Round, Gloucestershire CCG Information Manager and Ella Goodman, Senior Information Analyst Gloucestershire CCG

Delegates heard from Anna Round and Ella Goodman about the One Gloucestershire Analytical Development Programme. This was one of the highlights of the conference.

Paul Stroner, AphA CEO, summed up in closing remarks the view of most delegates:

AWESOME. YOUNG TALENT. BE PROUD.

Anna outlined the background within Gloucestershire and the bid to The Health Foundation to develop the programme. Details of what was developed from the bid and key objectives are shown below.



The Bid

- To produce 10 qualified analyst apprentices from 5 health and social partner organisations in Gloucestershire by 2020
- Engagement of an academic partner to deliver a Level 4 Data Analyst training programme
- To rotate 4 Analysts on 3 x 6 month rotations through Gloucestershire's analytical system
- Enrolment of all apprentices to AphA for length of their study
- To run 6 business insight workshops across the 5 organisations to educate clinicians and managers on the business benefits of using data
- To develop an accredited level 5 bespoke Health and Social Care course by April 2020



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The Objectives of the groups

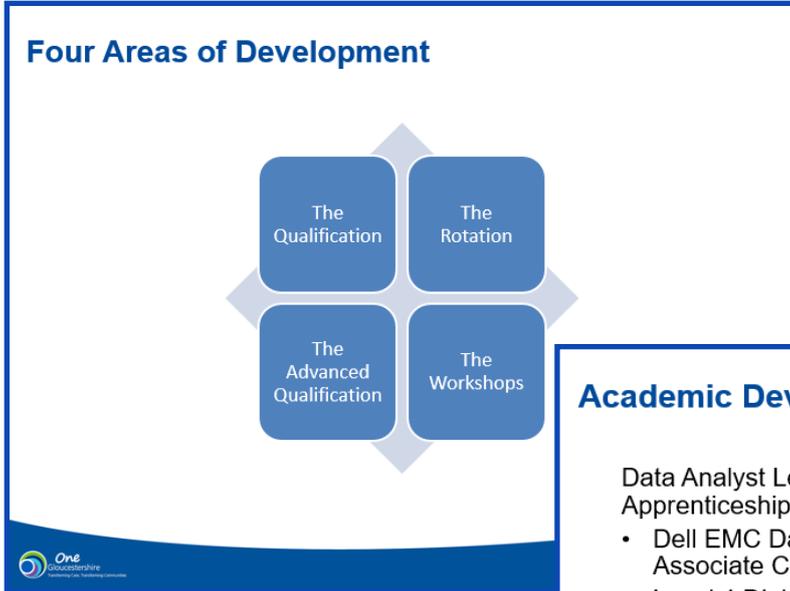
- Support professional development and training
- Support Analytical networks
- Explore supporting tools for analysts
- Encourage cross organisational working and collaboration
- Develop relationships between analysts and managers
- Stimulate demand for data
- Increase use of data to help develop, shape and improve services



4



The conference then heard about the areas for development included within the successful bid.



This also comprised academic development in partnership with Weston College.

Academic Development

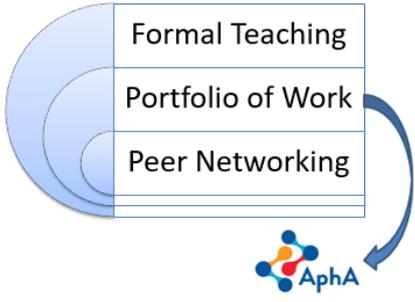


Data Analyst Level 4 Apprenticeship:

- Dell EMC Data Science Associate Certificate
- Level 4 Diploma in Data Analysis Concepts

Additional:

- Level 4 Certificate in Data Analysis Tools
- Microsoft Technology Associate Certificate in Advanced Excel



The diagram shows three overlapping circles on the left, each pointing to a box on the right. The boxes are labeled 'Formal Teaching', 'Portfolio of Work', and 'Peer Networking'. A curved arrow on the right side of the boxes indicates a flow or relationship between them. The AphA logo is at the bottom right of this section.

Long Term Sustainable Benefits

- Whole system networking and relationships
- Ability to attract staff at an entry level and retain staff that we have invested in
- Bespoke qualification
- Second cohort of apprentices to be run from next September and will reflect upon the benefits of replicating the rotation.

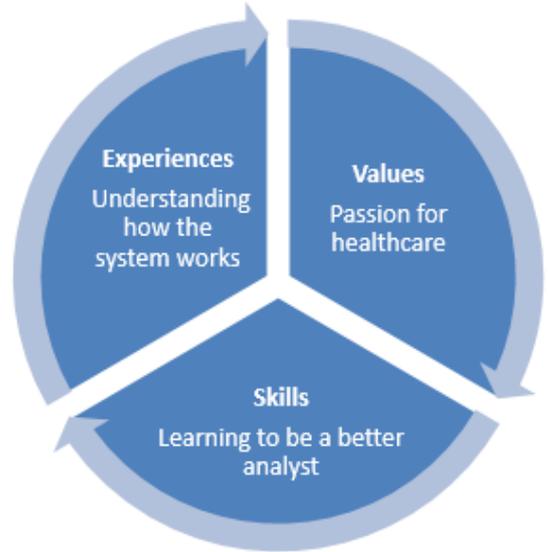


The main objective however was to enable long-term, sustainable benefits within the health and care community.

We heard that this is being realised with improved networking and relationships already realised and improved ability to recruit as a result of the offer.

We then heard a personal perspective from Ella Goodman, one of the rotational apprentices.

Professional Development



Aspirations

Where I was...

Organisation	CCG
Job Title	Senior Information Analyst
Band	6
Experience	3 years
Academic Qualifications	BSc Counselling Psychology

Where I could be...

Organisation	CCG/Acute/Mental Health Trust/County Council?
Job Title	Senior Information Analyst Principal Information Analyst Information Manager
Band	7+
Experience	5 years
Academic Qualifications	Level 4 Apprenticeship in Data Analytics BSc Counselling Psychology

Ella's reasons for joining the programme were for personal development, to gain experience, to learn to be a better analyst and to expand on a passion for healthcare.

The delegates heard about experiences in different organisations ranging from watching surgery, working with clinical coders and following data through to the data warehouse for use in reporting.



We have expanded our knowledge base, skills, and experiences and in parallel created a professional network to establish long-term collaboration in the health and social care system



Workshops

An Introduction to AI and its application to Population Health Management, David Howell, AD Informatics Surrey Heartlands ICS

David presented to the workshop about why machine support so important to us for the future.

In a really interesting session David described to us about the ability for machines to support humans to identify patterns and to flag up to us – **we may not know the pattern is there!**

An particular example was a slide with a jumble of letters—however within this was a pattern depicted within the data. But very well hidden. Did you spot the pattern? I certainly didn't!

David also highlighted that a big problem is the interchangeability of terminology between Artificial Intelligence (AI), Machine Learning (ML) and Data Science.

AI and ML are related but not quite the same thing.

We also heard about Clustering – a new spin/ flavour, however this has been used in Public Health for some time.

AI can be used to put patients into groups/clusters and over time may replace cluster over time.

We also learnt about association rule learning – e.g. what other customers bought on Amazon. A method for discovering interesting relations between variables in large databases.

From healthcare perspective we can use this to identify the association of clinical events or related conditions; predict steps in a pathway; likelihood of one condition associated with another e.g. mental health vs acute health problems.

David identified that these methodologies can be used in application to Population Health Management, in particular risk stratification; forecasting; geography; patient clusters.

There was also a thought that risk stratification AI models will replace historic tools. We will be able to use AI to identify new individuals – and incorporate self learning to improve algorithms (unlike traditional risk stratification).

And it is not just about numbers – text and pictures will be key. Using natural language processing means that these additional data sources could potentially be **'gold dust'** to use in the NHS and could be revolutionary!



Workshops

Whole System Wide Data Reporting Solutions, Graham Beales, Head of BI, Greater Manchester Health & Social Care Partnership

Graham presented to the workshop about how devolution has provided means to do things differently. The basics of this was building collaboration through:

- Building relationships,
- Identifying what existed already,
- Shared priorities,
- Identify where efficiencies can be jointly realised,
- Where expertise exists,
- Working together,
- Building a shared platform.

Utilised Tableau;

Utilised transformation funding, rather than a transformation model;

Upskilling the workforce came naturally;
Everyone enjoyed it – sharing ideas, networking;

Rationalised National Data sets:

- Manual processing,
- Data in different formats,
- API's for some, not others,
- Web scraping,
- Data not always accessible,
- Issues sometimes mean data not available.



Collected local data to overcome gaps in system wide data;

Developing in collaboration was key for shared understanding and agreement along with move away from performance management to developing solutions for the future.

Graham told us that better understanding leads to better understanding for delivery and commissioning and evidence presented visually is more compelling. We then saw fantastic examples of urgent and emergency care dashboards which evidenced all the background that Graham had taken us through.

A fantastic workshop that showed what can be achieved through collaboration!



Workshops



Benchmarking Network

Optimising your use of benchmarking information

NHS Benchmarking Network—Stephen Watkins, Stephen Day, Dave Barker

Workshop attendees received an overview of the NHS Benchmarking Network and current work programme. This offers unique data views, and aims to fill gaps not covered by central NHS information sources.

Over 300 member organisations from Commissioning, Mental Health, Acute and Community sectors.

Member led topics are advised by Steering Groups and Reference Groups.

Outputs include:

- Interactive toolkit.
- Infographics.
- Bespoke reports.
- National Conferences.

Attendees then saw a range of outputs and tools.

Workforce – what works best?

- Does the length of therapy input impact on AVLOS? An example in Mental Health showed that there is a direct correlation.

Benchmarking data collection and analytic tools:

- Data collection process.

Offline toolkits:

- Simple tools with drill down / peer comparisons, built within Excel.

Example illustrated using Mental Health toolkit:

- Peer group comparisons.
- Range of metrics – absolute versus population based.
- Context of data.
- Workforce profiles.

Integrated Care System Benchmark tool:

- Profiles available at source level, ie. CCG or LA and at aggregated level
- Developing the concept: during 2019
- Phase 1 full launch October 2019
- Phase 2 launch with additional functionality Spring 2020

Panel Discussions

Neil Pettinger for NHS Scotland, Peter Smeeth for NHS Wales, Tracy Avery for NHS Northern Ireland

At the end of day 2 we heard from representatives from each of the regions, Scotland, Wales and Northern Ireland.

These were massively insightful presentations and discussions.

We learnt about the different structures in Scotland, Wales and Northern Ireland.

The conclusion that delegates reached was that we would all welcome the stability and continuity in Scotland (no reorganisations since 1999).

In an ideal world (!) a mix of the best bits of all would be fantastic!

- o Stability in Scotland;
- o 'Once' for Wales approach – same systems, same tools;
- o Northern Ireland - Integrated System.



Neil Pettinger



Peter Smeeth



Tracy Avery

Day 2—Annual General Meeting

The AGM was held at the start of day 2 to align with the Conference.

The CEO's report covered a review of last 12 months activities which included:

- First full year operating as a Community Interest Company;
- Working in partnership with other organisations;
- Involved with further development of FED-IP;
- AphA – NHS-R alliance; NHS-R expanding UK footprint;
- Involved with accreditation of apprenticeships Health Education England;

Finance report— Annual accounts have been submitted and will be available on the AphA website. The accounts show a small loss mainly as a result of training delivery which had lower than expected uptake.

Website update—redesigned website was launched in May 2019 to improve user experience and this has been recognised as a great success. The roadmap for further development includes accepting payment by direct debit to enhance and simplify the membership renewal process.

Magazine update— the newsletter was replaced by the AphA Magazine part way through the year to reflect the growth and increase in content. Thank-you to the regular contributors and guest contributors. If you want to contribute to future editions please do get in touch!

Business Plan and 5 year strategy— this covers the governance of the Community Interest Company and is regularly reviewed by the AphA Board. The latest review highlighted progress, however this does need to be collectively owned by the membership. Watch out for updates in future issues of the AphA Magazine.

The main focus is about growing the membership, succession planning (Board members), development and sustainability.

FED-IP and Professional registration — three Assessor training sessions have been delivered with a fourth planned. The process and template have been developed and are now being used. The 100 in 100 days pledge closed in 49 days which was a fantastic achievement by our members. We have embedded a sustainable process and there is huge enthusiasm from Assessors and members. This represents a major milestone for AphA and the Analytical profession following considerable commitment from Assessors and the Professional Development Committee.

Next stages include enhancing guidance, the next '100', developing Associate Practitioner level, training course accreditation, review of standards and registration levels.

Members Vote: A vote was held on the proposal to increase membership fees to £50 per annum. Whilst the vote was agreed in principle by the majority, a discussion followed meaning that the AphA Board will reconsider the proposal and issue an amended proposal to members for another vote.

AOB—none.

Keynote Speaker

Matthew Gould, CEO, NHSX

Matthew told the delegates that he is not a data expert but has seen the value of what it can achieve.

He was at #aphaconf2019 to:

- o Demonstrate support to analysts and AphA;
- o Illustrate how overall plan and what we can do to fit together;
- o Here to listen—what messages did we want him to take away.

NHSX background is a focus on real world outcomes with five missions:

- o Reduce burdens on staff;
- o Put services and info in hands of citizens;
- o Patient data accessed by clinicians wherever they need it;
- o Improve productivity;
- o Improve safety;

Underpinned by the long term plan

3 main roles

- o Help get resource and capability in the right places;
- o Set standards to allow systems to speak to each other;
- o Build platforms with NHSD once at the centre – e.g. screening programmes, doesn't make sense to have separate back-ends for similar systems.

Few observations:

- o Our role and what NHSX can do;

Struck by degree of **shared vision** by where we want to get to;

- o Heart of this is role of data and role of analysts – create a system that can learn and evolve that it doesn't do consistently at the moment;
- o Exciting vision – requires us to get the data and analysis right; analysts to be supported and have the tools required with social care as much part of the vision as health.
- o *“Need to give front line tools they need to do it. Quality of systems and demands we put on the users. Give them value from what we are asking”.*
- o **“Will need to invest in analysts to make this work”**. Recognition and Professional recognition, formal structures, training, belonging. **“That is why AphA is so brilliant”**.
- o **“The technology in the NHS is the people”**. The dilemma is that the money and bandwidth goes to the tech not the people.



- Need a strong bias to do things in an open way. The data and the methodology. Reuse so that we are not creating from scratch. Share our workings to reduce errors.
- Keep public onside – times when Centre has done things and lost public trust.
- Transparency, working to clear principles, mature conversation about the value of the data we hold.

What NHSX are doing:

- Professional agenda: working closely with Ming Tang, NHSE to create support for analysts.
- In NHSX there should be a head of profession for analysts.
- Director of Analytics should have a national role and voice for analysts.
- Set-up own in-house analytics and data sciences lab – pledge to share and to develop in an open way.

Delegates then had many questions, some of which are below:

Q. AphA is a huge support for analysts but employers give little support. Will you approach them to encourage them to back analysts/AphA?

A. YES. Need to use leverages (money, rules, CQC inspection mandate) to drive change. System is stretched so how can we find extra bandwidth. YES but not sure how.

Q. How can NHSX help us to work within IG rules to share data at patient level to assist PHM?

A. We are in a difficult place where for good reason have created. Need clearer guidance as should be an enabler not blocker

Q. Should there be a chief analytical office on NHS Trust Boards?

A. Need to think carefully about this. More important that the CEO, Chair and whole board have sufficient competence to engage on this.

Q. Are any of the AI developments going to trickle down to work collaboratively with providers to use machine learning at the coal face?

A. Data science and analytics and ML will be delivered in conjunction with front line.

Q. What is NHSX role in facilitating access to data for the wider research community?

A. Will be part of mission to ensure data (anon) can be safely and effectively accessed. If constraints removed opportunity for researchers to help become a learning organisation

Q. If aim for whole board to be competent in and champion analytics, how can we address this? Will NHSX invest to drive improvements in analytics at local level?

A. Not a simple answer; how to propagate good practice.
Proven technology takes 16-17 years to spread across the NHS.
Do boards genuinely understand data?

Day 2—Speakers

Data—A Clinical Perspective

Dr Jenni Quint, Respiratory Epidemiologist

The conference delegates were enthralled by Jenni’s presentation. **A Clinician who loves data!**

Jenni illustrated to us *‘What does a clinician think about data?’* and *‘What should a Clinician think about data?’*

What does a clinician think about data?



What should a clinician think about data?



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We heard about data collection – clinicians are not thinking about how the data will be used and in turn making the data better.

- Entry tools and reporting is inefficient.
- Clinicians are skilled at observation and medical decision making but have struggled with accurately recording and measuring activities.

This in turn leads to data variation and as well are all aware problems with data quality.

Issues arise with Accuracy / Quality:

- Data is never error free.
- Entry errors.
- Incomplete data.

We then heard about how a clinician uses data and the range of uses was vast!



Jenni highlighted that Quality Improvement is almost impossible without (good) data.

Run charts were considered as really valuable but Clinicians need help with interpretation and general things to look for.

What conversations should a clinician have about data?

Need to understand the data & how it is reported to make sense of any further analysis.

AI in the healthcare environment – Jenni highlighted that clinicians love trendy things; however if the data is poor the outcome will also be poor!

Challenges and pitfalls:

- Need to understand limitations of the data, reporting and analyses.
- Data quality – presentation can influence the understanding

Clinicians need higher awareness of data collection process; this will help engagement and improvement.

Clinicians need....

- A higher awareness of the data collection process
- A greater appreciation of the usefulness of the data.
- A greater willingness to contribute to the data collection/validation process at a local level
- A greater likelihood of changing their practice concerning the collection/validation of data in the future.

What conversations should a clinician have about data?

- Understand the data
 - Definitions, how it is reported and used
 - episodes vs inpatient spells
 - Primary diagnosis vs all diagnoses (or procedure)
 - What is meant by length of stay – days vs hours
 - Time periods for readmissions
 - Case mix adjustment
 - Raw vs adjusted data
- Denominators for comparisons (local colleagues vs external peer group - defined how?)

Delegates then has questions for Jenni. Of most importance was:

Q. How can AphA help to improve clinical engagement with analytics?

A. Conversations, starting small, build from there.
Hold data MDTs.

Q. Can we have a clinical advisory group in AphA? ***

A. Watch this space!



What about general measures? What good practices can I encourage my team to follow?

There are many ways in which clinicians of any seniority can help data quality. These range from mindfulness of these issues during day to day practice, to getting more involved with initiatives managed by information staff:

Open channels of communication between clinicians & information/coding staff:

- ✦ Invite coding staff on a ward round
- ✦ Offer to see the casenotes of any episodes they may be having difficulty coding
- ✦ Find out the top 3 problem diagnoses or procedures clinical coding staff encounter in your clinical specialty
- ✦ Ask to see a proportion of your coded **FCEs** each month and feed back any problems
- ✦ Discuss the design of any proformas you might use with coding staff: small changes can result in large coding improvements
- ✦ Find out what data quality meetings exist in your Trust, and ensure clinical representation. If there aren't any, then start one!
- ✦ Ensure the details of all diagnoses and procedures are clear and easy to find in every set of casenotes
- ✦ Copy and circulate the **Top Ten Coding Tips** to junior staff. They are basic note-keeping tips which make a huge difference to coders
- ✦ Encourage juniors to undertake audits using hospital activity data
- ✦ Communicate all transfers of care to those responsible for the **ward returns** (usually ward clerks). Write them in the notes too
- ✦ Use structured admission and discharge proformas whenever practical
- ✦ Summarise diagnoses and procedures in the last entry in the casenotes before discharge

Main Conference Sponsor—Qubix

Qubix www.qubix.com

Digital Solutions for NHS Trusts

Qubix provides Financial Performance and Advanced Analytics solutions to NHS Trusts that improves financial management, increases efficiencies and improves outcomes.

Qubix were the main sponsor for the Annual Conference 2019. Alex Jennings presented about the organisation, tools and capabilities and Paul Johnson provided further detail in an engaging question and answer session.



Thank-you to Qubix for being the main sponsor for #aphaconf2019

We hope you enjoyed the event as much as we did!

Main Sponsor—Qubix

Some of the key points we took from Alex's presentation and discussion:

- o Help organisations to get most out of their data
- o Works with number of NHS organisations
- o Built and designed with NHS
- o Help with resourcing
- o Help with building autonomous data warehouse and/or analytics platform - reporting available via browser and mobile
- o SPC reporting
- o System providing data calculations - avoid manual errors
- o Decisions made based on evidence works operationally
- o Interactive dashboard provides self-service data discovery features and collaboration option
- o Present mode - quickly show slide type view with different graphs
- o Add comment on graphs for greater understanding
- o Easy to use (drag and drop) chart comparison with only few clicks
- o Machine learning capability
- o Tool helps to deliver insight and reduces data processing time
- o Cloud based product
- o Works with existing technology and can be started on a small scale
- o No user limit on using the product
- o Very secure and auditable role based security layer



AphA Branches

The Conference delegates enjoyed a session that was led by Emma Wright, AphA North West Branch Lead.

The session incorporated interactive voting, and we will feature some of the feedback across the next few pages.

Delegates also heard from Anton Parker, AphA South Branch Champion. Were you inspired to become a Champion? It would be hard not to be!

Do you know your local branch and branch lead? Emma provided a welcome reminder.

Which branch are you from?

- Scotland 0 %
- Northern Ireland 6 %
- North East 0 %
- North West 8 %
- Yorkshire & Humber 5 %
- East Midlands 7 %
- West Midlands 5 %
- Wales 6 %
- East of England 2 %
- South West 36 %
- South 13 %
- London 13 %

We asked what you want to see at branch meetings:

- 41%** Practical sessions / Workshops.
- 30%** Show and Tell from other Organisations.
- 12%** Clinical speakers.
- 12%** Professional Registration

The majority of delegates associated themselves with South West branch, followed by South and London branches.

49% of delegates had attended a branch meeting previously.

The majority of delegates associated themselves with South West branch, followed by the South and London branches.

Role of the champion—AphA Champion (Anton Parker)

Anton Parker gave delegates an overview of the role of the AphA Champions, supporting Branch Leads, but most importantly raising awareness. This was a very entertaining session and if you are interested in becoming a Champion the Branch Leads will be pleased to hear from you (contact Val.Perigo@aphanalysts.org) - oh and we all thought Anton watches too much TV, as we journeyed from movie to movie—ET, The Grinch, Shawshank Redemption amongst others!

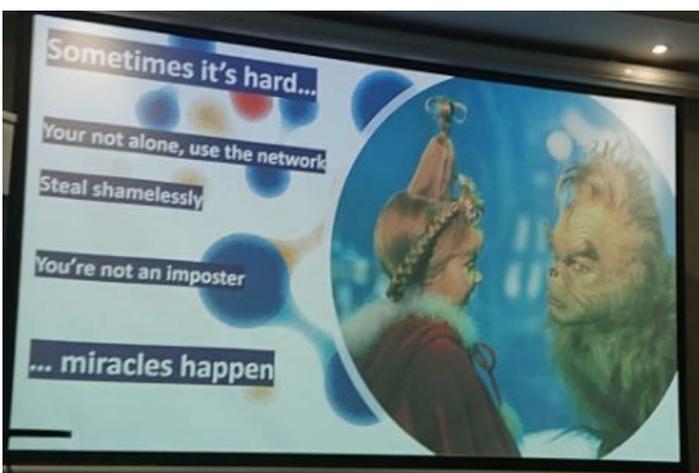
Sell, Sell, Sell!



It's rewarding!



Sometimes it's hard...



Your branch needs you!



Inspired by Anton, **24%** of delegates said that they were interested in becoming an AphA Champion and **41%** said 'maybe'.

Your branch leads will be pleased to hear from you!

**AphA Award Ceremony
Analyst of the Year 2019**

**Winner: Lori Edwards Suarez, Nottinghamshire Healthcare
NHS FT**

Shortlisted:

Chris Nugent, Public Health Agency, Northern Ireland

Sarah Lea-Weston, NHS Devon CCG

The judges said: *A stand-out performer in a quality list*

The nomination cited Lori as an invaluable member of the Department of Psychological Medicine since September 2017. The department is part of the NHS and receives circa 6,000 referrals per year for assessment and treatment of complex psychiatric presentations in a large NHS general hospital. Lori was employed in order to improve the department's quality of provided care.

Lori in fact achieved several objectives well beyond this basic one. Lori improved patient care and the effectiveness of NHS mental health services in wider Nottingham.

While not entirely representative of her multifaceted contribution, the project Lori was nominated for involved the evaluation of clinical effectiveness and cost-effectiveness of a novel psychiatric service model that was developed over the last two years. The model involved the deployment of our hospital-based liaison psychiatry team into primary care, to care for people with medically unexplained symptoms and complex physical-mental co-morbidity.

The judges said: *Multi-faceted project.*

Well delivered.

Lori innovated on several levels by applying analytics to tackle complex clinical questions. She did this by involving the whole spectrum of involved professionals from primary to tertiary care, from clinical staff to managers and from administrators to policy makers.

As a result, Lori's scope was pragmatic and clinically relevant, but also armed by superb analytical skills. Her solutions led to the development and subsequent improvement of our new service.

The service demonstrated excellent clinical effectiveness and financial effectiveness, and has produced a fully replicable model. In fact, the results were so good that the project is about to receive a seven-figure investment for replication to the rest of Nottingham, and was rated by the BMJ awards as one of the top-6 mental health projects in the UK.

Furthermore, the impact of the project is now nationwide, with the Centre for Mental Health about to publish a report on it, recommending its dissemination.

Lori's contribution and dedication was crucial in all the above excellent achievements.

The judges said:

Sensible attempts to make the most of Proms information.

Mature approach to analysis using statistical methods.

Wide range analyses undertaken and direct links to service improvement.



AphA Award Ceremony

Team of the Year 2019

Winner: East Kent Hospitals NHS FT

Shortlisted:

Business Intelligence, Imperial College Health Partners

Digital Research Environment Team, Great Ormond Street Hospital

The judges said:

Overall the team have shown at national level value of better informatics.

Chief Analytical Officer Marc Farr of East Kent Hospitals NHS, digital lead for Shared Health Analytics for the Kent and Medway STP, Thomas Lovegrove Information Lead for the Trust and their virtual team of Analysts were nominated for the AphA “Team of the Year” Award.

Marc has worked previously in management consultancies and academia at UCL, currently developing a method for measuring analytical maturity in the public sector with the Health Foundation.

The judges said: *Attempt to use AI methods on risk prediction and range of other work that shows benefits of better analytics.*

The nomination is for the team’s analytical diligence and cross-disciplinary excellence in evidence-driven innovation. The Team demonstrates remarkable NHS data scientific analytic ability in their approach to quantifying the impact of our proactive health coaching intervention in East Kent.

The judges said:

Excellent project work

Along with Marc the team Trust comprises:

- Thomas Lovegrove – Strategic Development Manager – Information Lead Clinical Psychologist about to start his final year part-time Health Data Science MSc from UCL.
- Bartlomiej Arendarczyk – Information Analyst Cambridge graduate in Natural Sciences.
- Tim Jones – Principal Information Analyst for Strategic Development.
- Lisa Barclay – Head of Local Care, Ashford CCG.

The nomination relates particularly to the team's application of complex multi-state models for the estimation of transition intensities between different Urgent and Emergency states and how these intensities are affected by covariates. The team adopted a semi-Markov approach for data modelling, basing their analysis on a total of 568 patients on the Health Navigator controlled intervention. They deploy Hazard Ratio analysis and visualize results using impressive incremental cost-effectiveness planes, working in R.

The team focused on evidencing the cost effectiveness of the intervention and impact on urgent and emergency care consumption. They demonstrate a statistically significant impact of the coaching intervention even on patient mortality, and an up to £24k per patient per year saving in hospital costs including an extensive analysis of tariffs and Quality Adjusted Life Years.

The entire project is based on openness and transparency, bringing together private, acute and commissioner organisations, sharing information and creating a transparent and scientific methodology to come to a joint view on the efficacy of a service.



Professional Registration—It is now a reality!

Another fantastic conference with many highlights!

However, for me, the chief highlight has to be seeing the first 7 Analysts receiving their FED-IP registration certificates. This represents a significant milestone in the profession and so fitting to take place at the annual conference.

This is an achievement that has only been possible due to the considerable hard work of Assessors and the Professional Development Committee and is something we have been eager to see for some time.



It is now a reality!

[pictured above –from left to right: Andrew Barraclough, Matthew O’Reilly, Garry Fothergill, Emma Wright, Sygal Amitay, Josie Browning; Jane Johnston)

Those pictured above are just the first of many who will be submitting their portfolios and joining the professional register. They are true pioneers and, as Assessors, have been key in making this happen.

They have worked to develop and understand the standards in practice as well as define the process all professional Analysts will go through. It is fitting that they should test the process first as not only do assessors need to be on the register to fulfil that role, they also need to understand the process which candidates go through to get there.

The AphA Board would like to extend their thanks to Glen Howard who has shown huge commitment and effort to the analytical professional to enable professional registration.

Professional Registration presentations

Congratulations to all of the 7 digital pioneers. We look forward to featuring more successful registrants in future editions of the magazine. Once again, can I take the opportunity to thank the Assessors not only for paving the way and testing the process, but also the considerable effort and enthusiasm they put into making this possible for all analysts.

The analysts were all presented with their FED-IP certificates by Martin Pitt, AphA President.



For more information please contact:

Glen Howard, AphA Director of Professional Development (glen.howard@aphanalysts.org).

Old friends and new friends



Networking, networking, networking





NHS-R Monthly update

NHS-R Profiles

R is a powerful tool for manipulating health and care data and a lot can be learned from sharing our experiences of using R with others. Therefore, in this monthly slot, we bring to you an NHS-R profile from one of our community members, to share their insider knowledge of using R...

<p>Sarah Jackson Physiotherapy Trainee, The University of Birmingham Former Healthcare Analyst, NHS Midlands and Lancashire CSU, Strategy Unit</p> 	
<p>R and Me</p>	<p>Projects in R</p>
<p>How did you first meet R? I first met R when I joined the Strategy Unit, 3 and a half years ago. However I was reluctant to fully let go of excel. I still use excel but R is much more efficient and there are endless amounts of things you can use R for.</p>	<p>Can you please name a project where you have used R? Improving the utility of Estimated Dates of Discharge at South Warwickshire Foundation Trust.</p>
<p>What sort of things do you use R for? I use R for data wrangling, data cleaning, creating data visualisations, statistical analysis and running regression models</p>	<p>Briefly describe what this involves. The main aim of the project is to develop an algorithm to predict estimated dates of discharge (EDD). We have had to produce a descriptive analysis on historical data from the trust to assess their baseline completeness and accuracy. The next phase of the project is to develop the algorithm using variables that are available at the point of admission.</p>
<p>What do you love about R? It will save you so much time compared to using excel, you can create visualisations exactly how you want them and there's a function for pretty much anything you could think of.</p>	<p>What are your key learnings from using R for this project (so far)? I've used more packages in this project than ever before such as <u>stringr</u>, <u>viridis</u>, <u>lubridate</u>, <u>vroom</u>. My data wrangling became much easier using these packages and my visualisations look neat. It has also helped me problem solve and improve my ability to gather variables into the data frame in the manner I wish.</p>
<p>What do you hate about R? That error messages sometimes seem more complicated</p>	

than they are and it's often something very small that I've overlooked.	
What are your top tips for using R? Persevere with it, it takes time. Once you've got the hang of it there will never be any need to crash your laptop with excel again. There are lots of resources online that can help answer queries and questions often with example code which really aids your understanding.	

NHS-R: The latest

As well as this knowledge, we also want to share with you some of the technical know-how that community members have used to wrangle with data in R, in the form of a recent NHS-R community blog release. This month, we have Zoe Turner, a Senior Information Analyst at Nottinghamshire Healthcare NHS Trust. She talks through the production of dygraphs for mortality surveillance.

I recently presented some of the mortality surveillance charts we use to @RLadiesLondon (a very welcoming group!) and one that got some interest was a chart of Nottinghamshire Healthcare NHS Foundation Trust deaths compared to ONS Provisionally Registered deaths. The chart looks good because it's interactive but this type of chart can be confusing because of the 2 y axes.

When I show this report I make it clear that the two axes units are *very* different and that its purpose is to show that the *pattern* of the deaths in the wider population matches that of the deaths recorded by the Trust. It's well known within Public Health that the pattern of deaths is seasonal, with a peak around January in the UK. However, this Public Health knowledge is not necessarily common knowledge in Secondary Care Trusts and it was one of the great benefits of having @lantheBee both create and present this report.

Getting ONS Provisional Data

I wrote about getting and formatting the spreadsheets from ONS for the East Midlands Provisionally Registered deaths:

but for the purposes of the mortality surveillance report I've used several years data and I normally keep the spreadsheets, save the merged data and then load that each time I need to run the R markdown report.

Next month we will share code and charts—look out for the October edition of the AphA Analysts Monthly Magazine.

Announcements

We have exciting news! We have changed the venue for the NHS-R conference 2019 on the 4th-5th November to Edgbaston Stadium, so that more people can attend! For those of you attending the conference, the address is as follows:

Edgbaston Stadium, Edgbaston Rd, Birmingham, B5 7QU.

We look forward to seeing you there!



With thanks to our sponsors

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Reflecting back on the conference:

A superb conference, it really does get bigger and better each year!

The video address from the Secretary of State for Health and Social Care was hugely encouraging for AphA members, "*data, data, data.*"

James Freed inspired us and is a key ally as we develop the profession.

Matthew Gould left us with many take home messages, NHSX on board with the agenda we are trying to achieve.

The interactive branch session was great. Don't forget to look out for an AphA event or Branch meeting in your area.

Perhaps the highlight was hearing about the apprentice programme in Gloucestershire, confident presentation by analysts with huge potential, and a programme many others will want to adopt.

Award winners and professionally registered analysts. **Congratulations!**

See you at the Annual Conference in Birmingham in 2020!

With thanks to Chris Mullane Photography

<http://www.chrismullanephotography.co.uk>

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