

# Welcome and Purpose of Our Sessions

# Presenter : Alison Tonge









### **Reimagining planning for the NHS**

#### Working Agenda for 12<sup>th</sup> October 2022

(Virtual or in person at Anaplan UK, Regents Place, Floor 15, 338 Euston Rd, London NW1 3BT)

Agenda item	Content	Time
Welcome and purpose of our session		11.15 to 11.30
Old world v new world planning	How do other complex industries do this- exemplars ? Why do we need a new approach ? What are the potential range of models ?	11:30 to 11:50
Ambulance service real world example South Central Ambulance Service	The Challenge The solution Work in progress/next steps	11:50 to 12:10
NHS real word example from Manchester University Hospital Trust	The Challenge The solution Work in progress/next steps	12:10 to 12:30
Bringing to life future NHS use cases	Demo Carousel     Workforce     Finance     Demand and Capacity     Facilitated Question and Answer session	12:30 to 13:15
Collaboration for planning and engaging you	Centre for planning support Early adopter club	13:15 to 13:30





# **Speaker Introductions**







Neil Callow SME Integrated Planning Arden & GEM



Tristan Colgate Managing Director, Fidenda



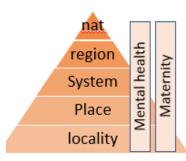
Steve West Director of Planning and Performance, South Central Ambulance Service NHS Trust



Edd Berry Programme Finance Director at Manchester University NHS FT Wouter van Leeuwen Principal consultant and Regional Director, Fidenda



Julian Di Tomaso Enterprise Account Manager Anaplan



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# System delivery of transformation

- Decision making on priorities
- •Transformation programs, initiatives and impact
- Accountability matrix
- Quality, value, capacity , performance and outcomes realisation management
- Social value delivery
- Connected leading and lagging measures

#### Organisation Resource Planning and Management

#### NHS Trusts

- •Mental health
- •Community
- Primary care
- Independent sector
- •Collaboratives/ion
- Workforce
- Finance
- •Capacity and Demand
- Procurement and inventory
- •Accountability measures, results and change programs



NHS Arden and

Greater East Midlands Integrated Support Service

Agile interdependency



## **House keeping**

 Please use the chat function to ask any questions or provide in put during the event

Greater East

- Any colleagues joining the event that have not registered, please could you put your name and email address into the chat
- We will be hosting a Q&A session after our case study presentations during which we will answer key questions posted in the chat
- Colleagues will have received a link to a short survey. We ask that any colleagues who have not yet completed this survey please do so after the event. We will put a copy in the chat for you- we would really value your input
- Following the event, we will collate and respond to any questions not answered during the Q&A as well as report on the findings of our survey







# Old World V New World Planning

Presenters : Neil Callow Julian Di Tomaso





# What is planning?

### For something so important, do we really know:

- Why we're doing it?
- How we do it?
- Who needs to be involved?
- Are we using the right technology?
- How good are we at doing it?
- Is there a better way?

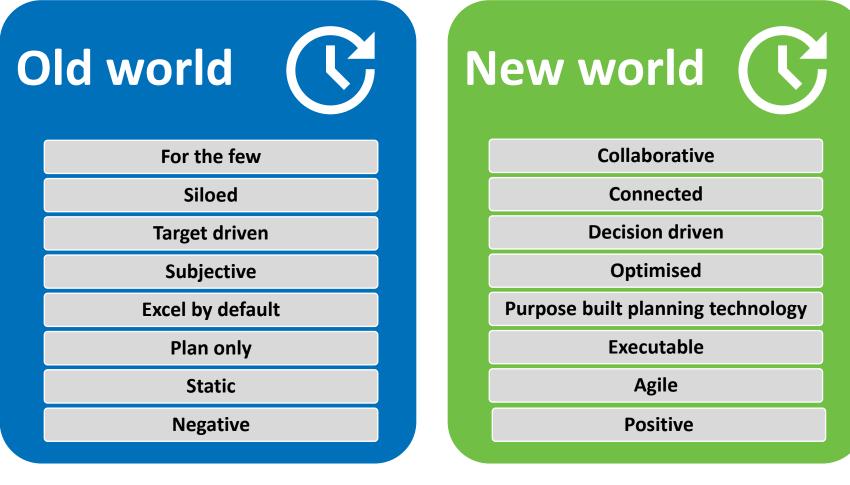


Greater East Mic



## **Old World vs New World**









#### Customised solutions for the whole NHS

## Connected planning example for an acute provider

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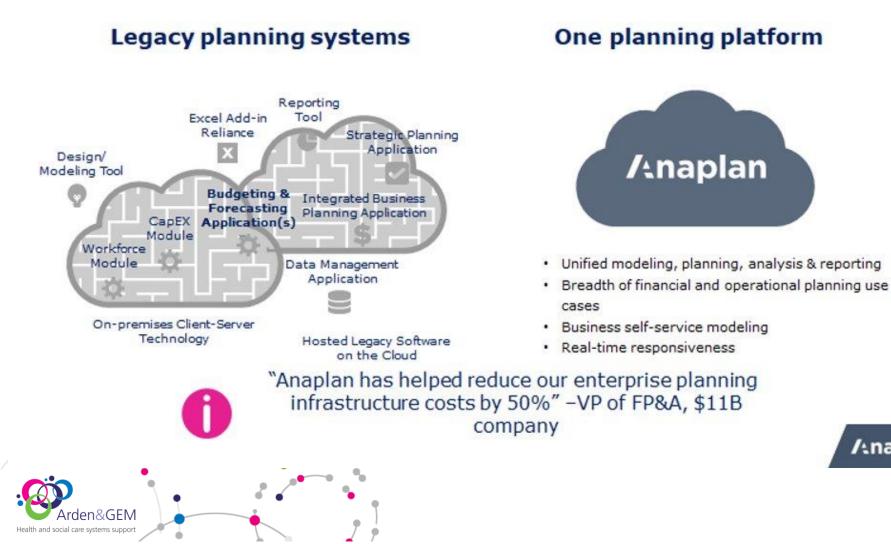






/ naplan

### **One Connected Planning Platform**







#### Recognized as the Connected Planning / xP&A / DOP&A Pioneer \*



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#### Power of Anaplan Platform: Benchmarks



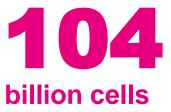
Anaplan platform has the computing power capable of processing over



operations per second



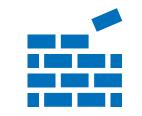
The largest single model on the platform has





#### Patented Hyperblock<sup>®</sup>

Optimized to process blocks rather than cells, allowing large scale changes to happen very fast



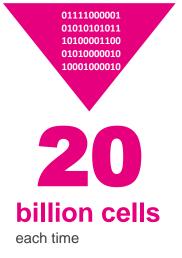


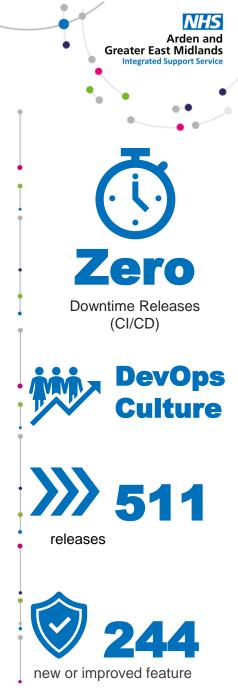
On a specific day in last 6 months, more than



#### trillion cells

were updated; the platform frequently sees transactions that update more than

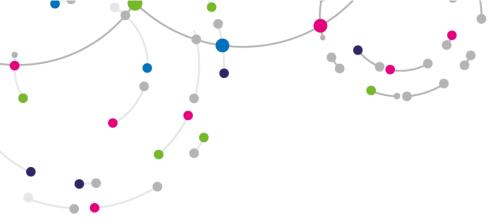




22,239,589,977 ,129,368

Cells recalculated in the last 6 months (22 quadrillion)





# Ambulance Service Real World Example – South Central Ambulance Service

**Presenter :** 

**Steve West** 





#### Resource Optimisation Project Integrated Demand & Capacity Planning

Steve West, Director of Planning & Performance Forecasting, SCAS







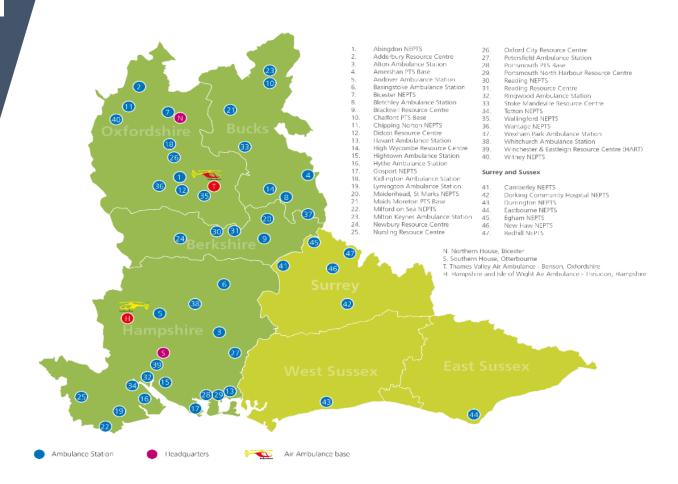
# **The Start of our Journey**

HX59 FM

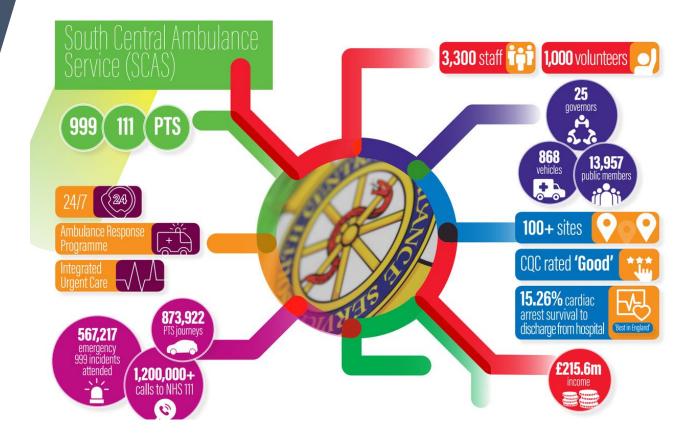


**Ambulance Service** 

#### **About Us**

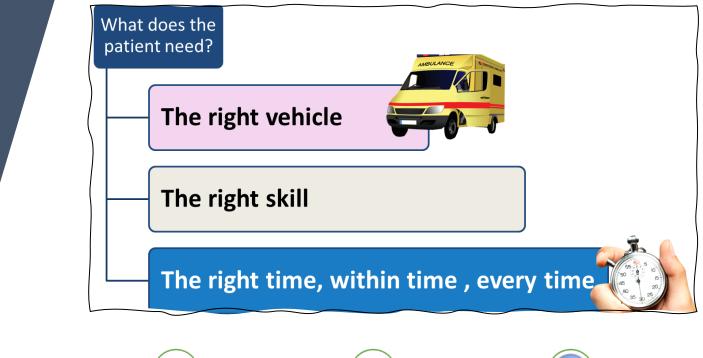


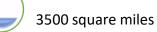






**Our Challenge** 







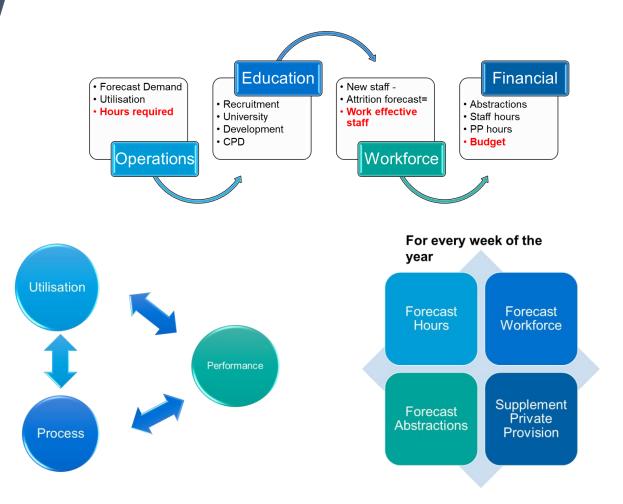
500,000 incidents

24/7

7 minutes from call to on scene



#### Integrated Planning Approach





#### The Problem

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#### Reliant on numerous spreadsheets

Current process is Exemplar

Reliant on legacy databases







#### The Idea

Implement a Single Resource Optimisation Solution



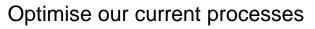
Integrate Resource – 999, CCC and PTS



Improve efficiency & effectiveness of planning processes



Connect our Data, our People and our Plans





**Build Resilience** 









**NHS** South Central Ambulance Service NHS Foundation Trust

# KING Global Digital Exemplar Programme





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#### The Involvement

The Programme, Stakeholders,

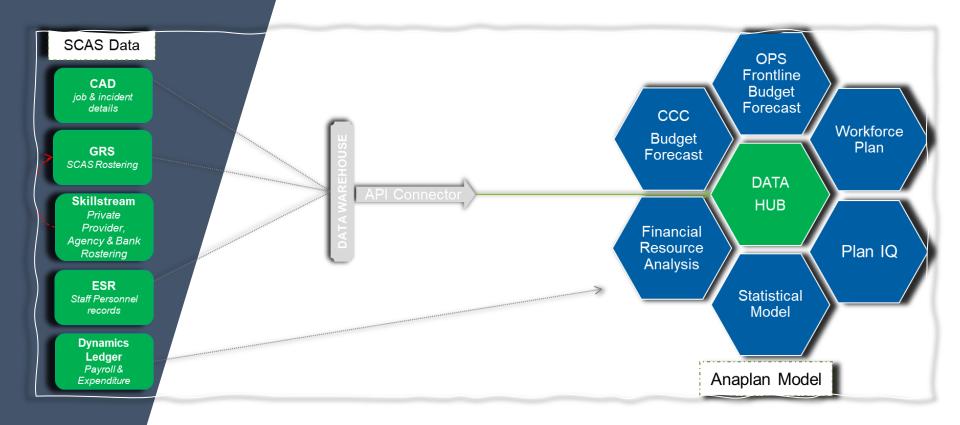
**Consultants & Project Team** 



# **The Methodology**

HX59 FNN





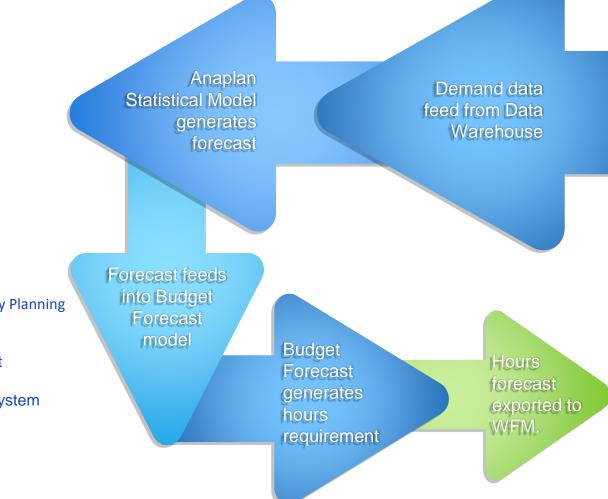


#### The Forecasting Process SO WHAT

utomated Patient Led Demand & Capacity Planning Process

**Generates Staffing Requirement** 

Exports to Workforce Management System





#### **Performance Prediction**

Multivariate regression model enable future performance risks to be identified and actions taken to mitigate

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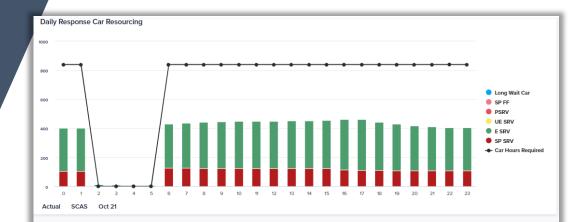


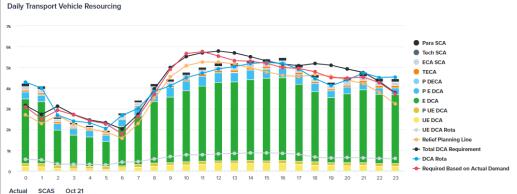




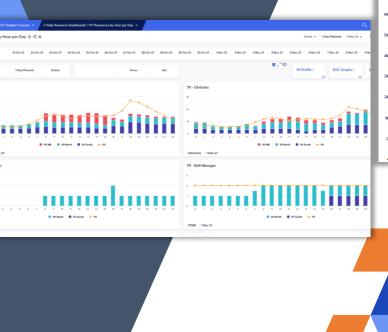
#### Daily Resource & Vehicle Models

**Ops Frontline & Clinical Call Centre** 





#### **Refreshing at 15-minute intervals**





# **The Success of our Journey**

HX59FM





Automated Integrated Planning of 999, 111 & EOC

mproved forecasting accuracy and timeliness of reporting

Improved planning processes reducing need for private ambulance providers saving £1m+

Aligns current & future workforce plans with patient demand, operational plans & strategic goals

Reduce risk associated with talent shortages and sourcing of highly skilled and technical personnel



#### **Machine Learning Models**



When looking at the forecasts, it is evident that the ML model has improved the MAPE by 1.7% compared to SCAS legacy Short Term Forecast.

Responses					
	Absolute % Error	МАРЕ	RMSE		
Plan IQ	0.3298	4.578	13.01		
SCAS STF	1.224	6.398	18.35		

#### **Key Benefits**

- Improved accuracy by leveraging new and existing data
- Amazon Forecast enables advanced forecast algorithms
- ML algorithms can run more scenarios, and find correlations and trends that wouldn't otherwise be found.



#### **External Adoption**

SCAS Connected Planning Model











# Planning & Budget Setting Transformation

Edd Berry Director of Finance Innovation

Manchester University NHS Foundation Trust







# **The Challenge - Background**

- Group of 10 Hospitals / Managed Clinical Services each with their own DoF and Management Accounts Team
- £2.5bn turnover and 30,000 staff
- All planning / budgeting supported via spreadsheets
- Size of trust has resulted in granular detail being too large for a single consolidated spreadsheet
- Annual Plan timetable / assumptions not within our gift
- Local budget setting may run in tandem with uncertainty around assumptions – pay awards, income etc
- Significant cost saving / waste reduction targets not confirmed until the end of the process
- Coincides with the NHS's busiest period (Winter) and efforts to meet the current year's budget / CIPs



# **Pre-Anaplan Pay Process**

- Pay award calculation for all 30,000 staff. All in spreadsheets:
  - Reviewing the establishment
  - Reviewing the actuals / Staff in Post
  - Updating the payscales (+1300 pay points)
  - Significant staff not on MFT payroll Junior Doctors
  - Adjusting for tax/NI changes
  - Calculating incremental drift
- Reconciliation of current year's budget and recurrent budget
- Ongoing negotiations externally and internally around investments/pressures – continuously moving picture



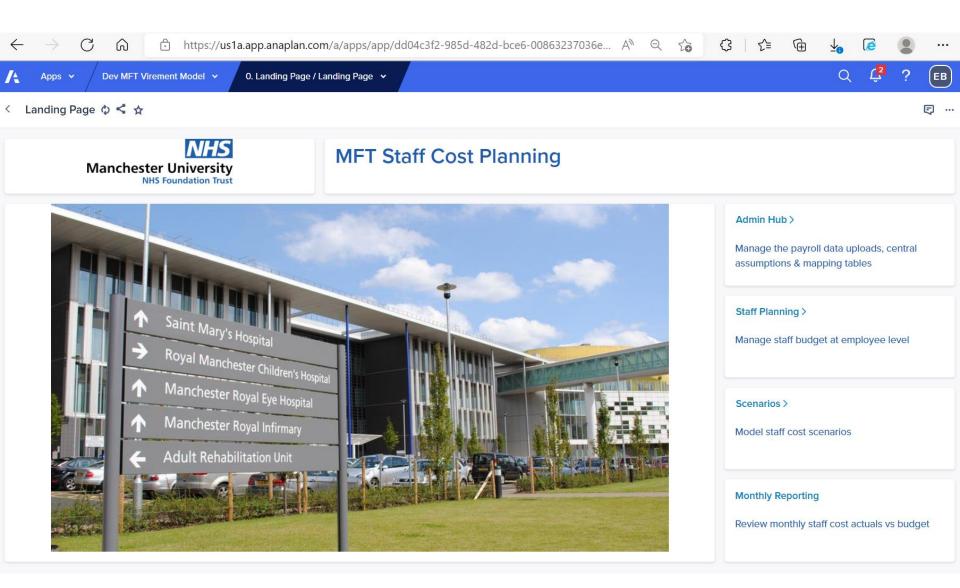
## Not sustainable status quo

- Highly transactional
- Multiple spreadsheets
- Single points of failure throughout process
- 10 different budget setting methodologies (1 per hospital)
- Thousands of hours tied up in data entry, cleansing, analysis, duplication and reporting



## Introducing: / naplan

- November 2021 Contract signed Friday, 14 workshops the following week with Anaplan partner Fidenda
- Identified & designed two models:
  - Pay Award Model
  - Annual Plan Model
- Intense period of development and collaboration throughout November and December
- Roll out of live Pay Award Model in January 2022 to 160 finance staff
- Fed by "Staff in Post" from our Electronic Staff Record (ESR) able to calculate our most accurate pay budget ever in a fraction of the excel based time



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Manchester University NHS Foundation Trust	sity										
01 Staff Planning - All Employees Excl Junior Doctors > Build staff budget for all employees excluding Junior Doctors	02 Staff Planning - Junior Doctors > Build staff budget for all Junior Doctors		ee Moves >								
03 Staff Planning - Budget Transfers > Review and manage budget transfers	Staff Planning - Summary > Review final staff budget by GL Account	Budget Setting Acceptance Document Sign off form for staff budget									

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Lynne Truss	Pearson	L4 - Admi	#124101						Estab	olishment				Not Yet	Re		
Jeremy Cor	byn Jalal	L4 - Admi	#124102						Estab	lishment				Not Yet	Re		
Keir Starme	r Messenger	L4 - Admi	#124103						Estab	lishment				Not Yet	Re		
Priti Patel	Lawrence	L4 - Admi	#124104						Estab	lishment				Not Yet	Re		
Donald Duc	k Waterhouse	L4 - Admi	#150421						Estab	lishment				Not Yet	Re		
Basic Annual Sa	lary (Medics/ No	n-Medic	cs)													2	•

	Surname	Pay Scale @ fin year start	Use Pay Scale Override?	Pay Scale Override	Pay Scale	Increment Date SIP	Use Increment Date Override?	Increment Date Override	Increment Date	Basic Annual Salary Inc Increment
Therese Coffey	Owen	XN0702	~	XN0801	XN0801	11/1/22			11/1/22	23,563
Joseph Stalin	Owen	XN0702	✓	XN0804	XN0804	11/1/22			11/1/22	24,386
Boris Johnson	Stephens	XN0301			XN0301	10/11/22			10/11/22	15,248
Lynne Truss	Pearson	XN0307			XN0307	10/1/08			10/1/08	21,777
Jeremy Corbyn	Jalal	XN0304			XN0304	10/23/22			10/23/22	21,777
Keir Starmer	Messenger	XN0302			XN0302	11/2/22			11/2/22	20,933
Priti Patel	Lawrence	XN0301			XN0301	10/4/22			10/4/22	20,330
Donald Duck	Waterhouse	XN0304			XN0304	4/1/22			4/1/22	21,777
Simon Stevens	Hall	XN0402			XN0402	10/19/22			10/19/22	22,549
Margaret Thatcher	Pelly	XN0806	✓	LC0102	LC0102	7/7/20			7/7/20	84,024



## **Rapid Development**

- Organisational annual financial plan is set in stone, budgets are not...
- Typical month sees 1,500 to 2,000 budget changes
- Switched off the ability to do budget changes in our ledger and channelled all changes through Anaplan
- Changes that previously took 15mins can now be done in seconds



## **Next Steps**

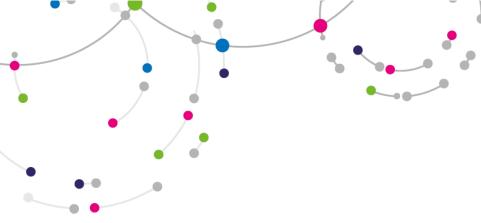
- Enhancing the full Annual Plan I&E model to eradicate spreadsheets for 23/24
- Consolidate learning and upskilling of staff / training
- Centre of Excellence for Anaplan within MFT
- Future models:
  - Forecasting with AI/ML
  - Capital planning
  - Balance Sheet & Cashflow modelling
  - CIP Model



## **Our learning**

- Wouldn't have succeeded without an implementation partner
- Slow down!
- Testing, testing, testing
- Significant cultural and upskilling challenge for our workforce
- Governance and transparency is essential





## Bringing to life future NHS use cases and questions for the panel

Presenters :

Tristan Colgate

Alison Tonge

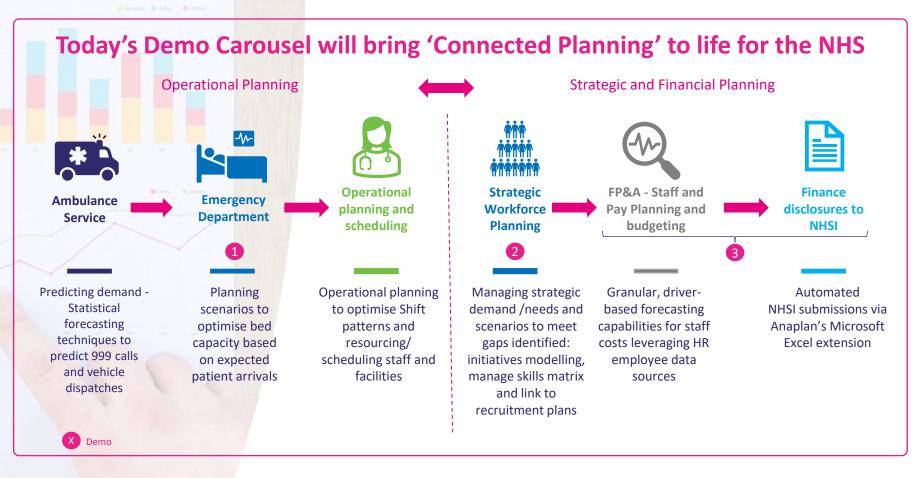




#### **Bringing to life future NHS use cases**











#### 1 NHS use case #1: ED Demand and Bed Capacity

Arden and Greater East Midlands Commissioning Support Unit

5 minute demo Emergency Department Bed Capacity Management



Matching demand and capacity based on granular real-time operational data by acuity by hour of day

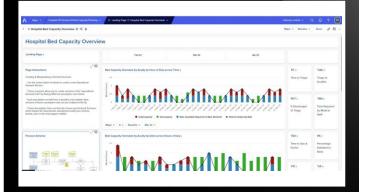


Exception-based visualization and reporting capabilities



Assumption sets that drive calculations and allow for operational scenario planning











#### **2 NHS use case #2: Strategic Workforce** Planning



8 minute demo

Uncover workforce gaps. Understand the cost and business impact of your decisions about how to close the gaps



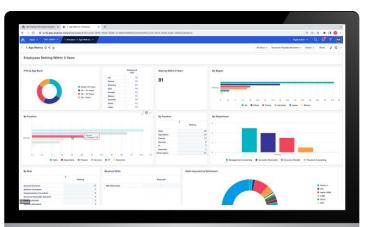
Provide complete transparency into your headcount and costs



Perform "what-if" scenario planning analyses to assess the impact of changes. Pivot workforce plans quickly and effectively.

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Provide early guidance for recruitment and closing skills gaps









#### 3 NHS use case #3: FP&A Annual Planning and forecasting



7

7 minute demo Managing the Annual Budget & NHSI submissions through improved budget setting process



Automated NHSI submissions via Anaplan's Microsoft Excel extension

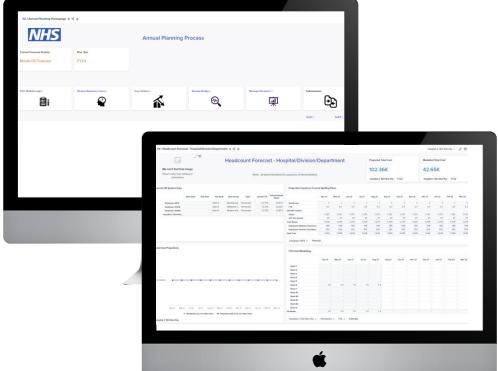


Granular, driver-based forecasting capabilities for staff costs leveraging HR employee data sources



Establish trust by increased auditability and accuracy







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#### Customised solutions for the whole NHS

#### Connected planning example for an acute provider

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## We are keen to hear your questions on the sessions







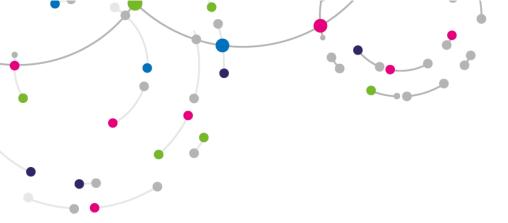


Any other feedback...









# Collaboration for planning and engaging you

Presenter :

Alison Tonge

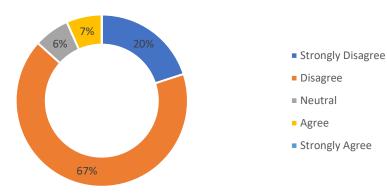






#### **Emerging results of the NHS planning survey** ...

Current planning processes in the NHS are well integrated and not siloed.

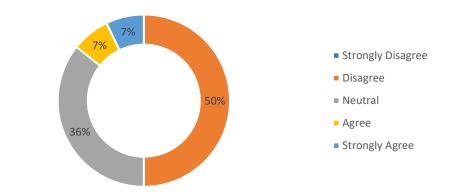


I have positive experiences with current planning processes in the NHS.

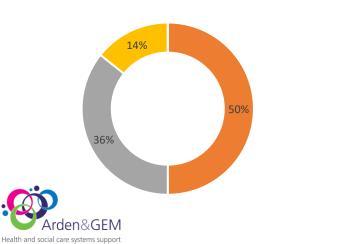
Arden and

**Greater East Midlands** 

**Integrated Support Service** 

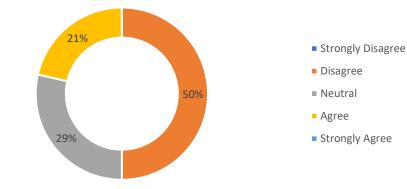


Planning processes within the NHS are collaborative.



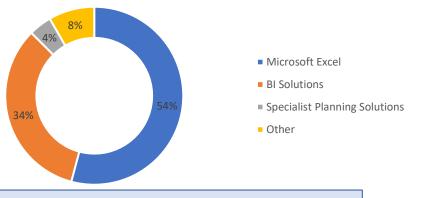
- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

There is high focus on clear shared goals with regards to current planning processes.



#### **Emerging results of the NHS planning survey** ...

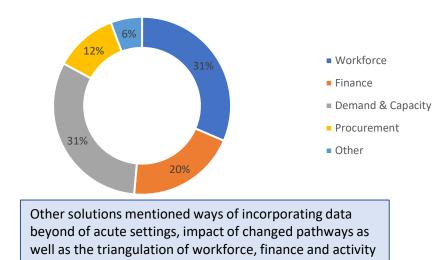
What technologies do you use for your planning processes?



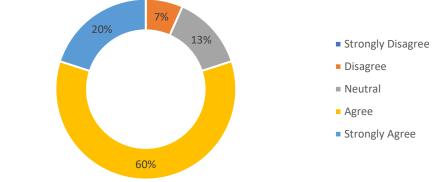
Other processes mentioned included STAR for resource allocation, quality improvement approaches, Lean and NLP high performing teams



Which of the following specialist planning solutions do you feel should be prioritised for development?



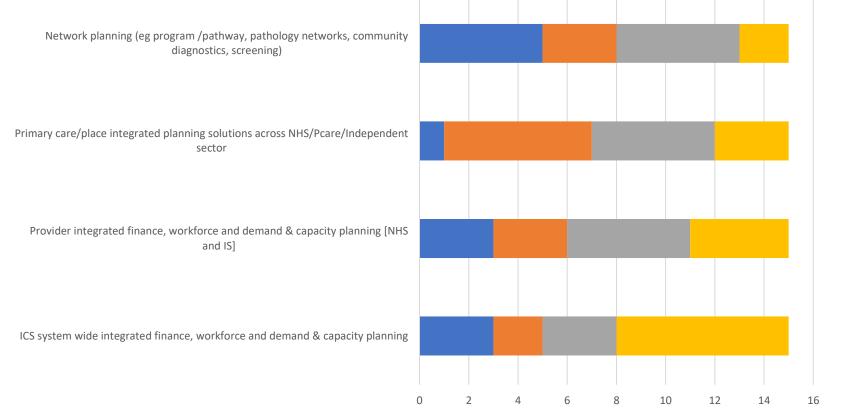
On a scale of 1-5, is improvement of planning and decisionmaking processes a priority in your organisation?





#### **Emerging results of the NHS planning survey** ...





■ 1 - Lowest Priority ■ 2 ■ 3 ■ 4 - Highest Priority



#### Thank you for your time

Arden and Greater East Midlands Integrated Support Service

Please feel free to contact Alison Tonge [alison.tonge1@nhs.net] if you are interested in taking part in a workshop in your organisation or system, so that we can develop this opportunity further.

#### Get in touch with us at:



www.ardengemcsu.nhs.uk



@ardengem



