

RPA update



University Hospitals
Plymouth
NHS Trust

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UHP in numbers 2023



Derriford hospital is located on the outskirts of Plymouth about 5 miles from the town centre.

Plymouth is a port city in South West England. It is located on the south coast of Devon, approximately 40 miles south-west of Exeter and 220 miles south-west of London. It is bordered by Cornwall to the west and has direct ferry links to France.



UHP employees just over 10,500 people.

We also support community hospitals and 3 Minor Injury Units in the region.

This infographic contains three data points:

- Recruitment:** We recruited circa 4,600 participants to NIHR Clinical Research Network portfolio trials - compared to last year's 4,400. (Accompanied by an icon of a microscope, syringe, and people).
- Research Output:** Published 444 research papers. (Accompanied by an icon of a stack of papers).
- Workforce Diversity:** #1BigTeam of 10,542 people, 75% female, 13.2% identify as Black, Asian and from an ethnic minority, 5.8% have a disability. (Accompanied by an icon of a diverse group of people).

This infographic contains four data points:

- Ward Care:** 120,314 patients cared for on our wards. (Accompanied by an icon of a hospital building).
- Outpatient Services:** 546,980 outpatient appointments attended. (Accompanied by an icon of a doctor and patient at a desk).
- Maternity Services:** 3,646 babies delivered. (Accompanied by an icon of a baby on a scale).
- Emergency Services:** 143,221 emergency attendances including to our Emergency Department, Royal Eye Infirmary and Minor Injury Units. (Accompanied by an icon of a hospital building and an ambulance).

Collaborative working



Experience, Guidance and opportunity providers

UI Path reseller and Automation Development provider



Building the team

We wanted to develop in house, and decided to structure the team with 1 Lead developer and Business analyst supported by 2 developers.

Look for the right attitude and personality when recruiting

Understand importance having a technical team (Admin teams alone can't do complex automation, coding, object oriented programming)

Someone who can think logically and perhaps coding experience in other areas

Keen to develop and learn



Engagement

So far we have engaged with the following areas within the trust in terms of automation possibility

- **Performance Information**
- Patient Experience Team
- Outpatient Appointment Centre (OAC)
- Human Resources
- Cancer Services
- Procurement
- Royal Eye Infirmary (REI)
- Central Records Library
- Neonatal
- Cardiology
- Information Technology (D&I)
- Inpatient and Daycare
- Emergency Department (ED)
- Microbiology
- Neurology
- Paediatric Theatres
- Payroll

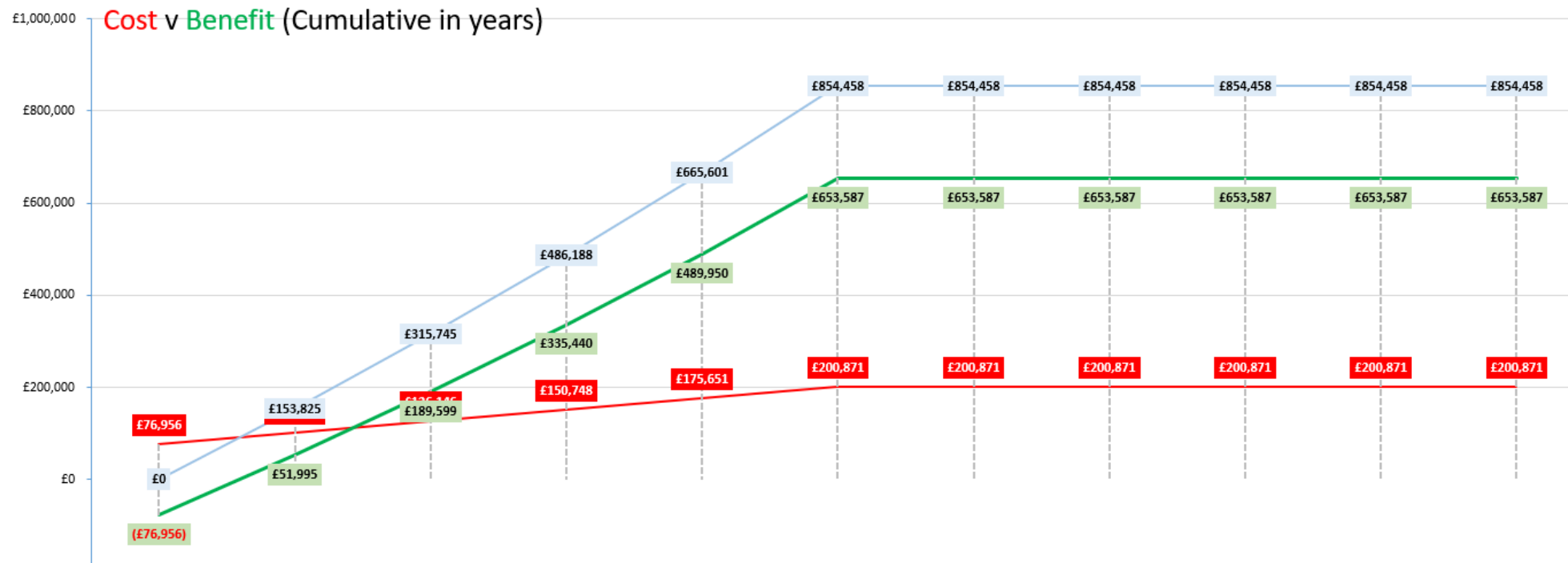
Achievements



- **71** automation ideas submitted in first 2 years
- **£81.5k** of Cash and Non Cash releasing Benefits released
- Currently **10** “Digital Assistants” deployed
- 5 other non “Digital Assistant” automations completed
- **4,368** hours saved or avoided to date
- Other societal and qualitative benefits released

Expected Benefits (5 years)

Cost v Benefit (Cumulative in years)



	Deployment	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Cost	£76,956.20	£101,830.03	£126,146.20	£150,748.25	£175,651.24	£200,870.99	£200,870.99	£200,870.99	£200,870.99	£200,870.99	£200,870.99
Benefit	£0.00	£153,824.59	£315,745.21	£486,187.97	£665,601.41	£854,457.65	£854,457.65	£854,457.65	£854,457.65	£854,457.65	£854,457.65
Net	-(£76,956.20)	£51,994.56	£189,599.02	£335,439.72	£489,950.17	£653,586.66	£653,586.66	£653,586.66	£653,586.66	£653,586.66	£653,586.66
Hours Saved	-	8,001	16,002	24,003	32,004	40,006	40,006	40,006	40,006	40,006	40,006

Select time frame to visualize	5 Years
Funding Received	£125,000.00

Attended capacity used	0.05%
Un-Attended capacity used	23.49%
Maximum anticipated capacity	64.99%

Automation lifespan	5 Years
Cost neutral at	0.6 Years
Project go live date	01-Oct-22
Cost positive from	06-May-23
BOT capacity used	23.54%
Inflation Rate	5.00%

Net gain after 5 Years	£653,586.66
ROI after 5 Years	325.4%
Total hours saved	40005.5 Hours
Annual hours saved	8001.1 Hours
FTE Saved	5.0

Additional Benefits	
Multiple processes selected	

Based on our currently deployed automations only

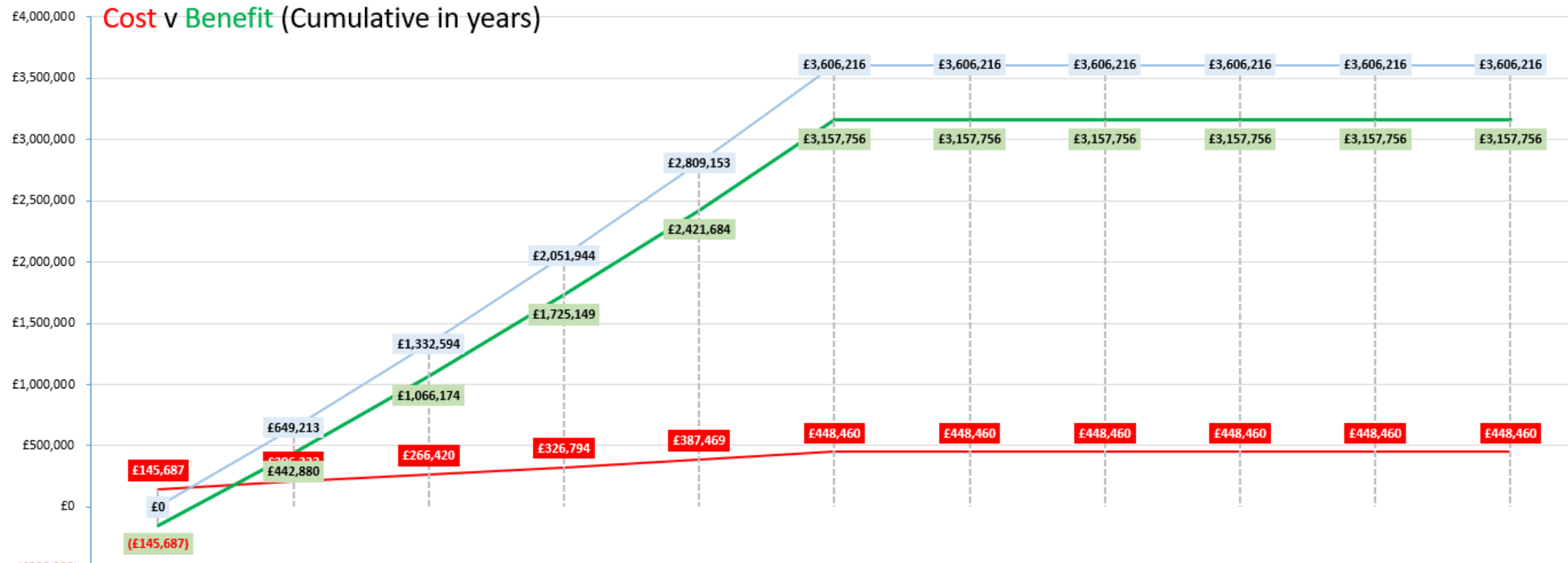
40,000 hours saved / avoided after 5 full years of deployment

- Equating to **5** FTE's
- Net gain of **£650k** of cash and non cash releasing benefits after 5 years
- These processes combined become cost neutral after **6 months** of full deployment



Projections (5 years)

Cost v Benefit (Cumulative in years)



	Deployment	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Cost	£145,687.07	£206,332.54	£266,420.36	£326,794.06	£387,468.70	£448,460.10	£448,460.10	£448,460.10	£448,460.10	£448,460.10	£448,460.10
Benefit	£0.00	£649,212.63	£1,332,594.35	£2,051,943.53	£2,809,153.19	£3,606,215.99	£3,606,215.99	£3,606,215.99	£3,606,215.99	£3,606,215.99	£3,606,215.99
Net	-(£145,687.07)	£442,880.09	£1,066,173.99	£1,725,149.47	£2,421,684.49	£3,157,755.89	£3,157,755.89	£3,157,755.89	£3,157,755.89	£3,157,755.89	£3,157,755.89
Hours Saved	-	33,580	67,160	100,740	134,320	167,901	167,901	167,901	167,901	167,901	167,901

Select time frame to visualize	5 Years
Funding Received	£125,000.00
Attended capacity used	0.05%
Un-Attended capacity used	23.49%
Maximum anticipated capacity	64.99%
Automation lifespan	5 Years
Cost neutral at	0.2 Years
Project go live date	01-Oct-22
Cost positive from	30-Dec-22
BOT capacity used	67.45%
Inflation Rate	5.00%
Net gain after 5 Years	£3,157,755.89
ROI after 5 Years	704.1%
Total hours saved	167900.5 Hours
Annual hours saved	33580.1 Hours
FTE Saved	21.0
Additional Benefits	
Multiple processes selected	

* Costs not fully calculated until automation ready for deployment

Based on current projects in the pipeline

- Anticipated **33,580** hours per annum to be saved (**167,900** after 5 years)
- Equating to **21** FTE's
- Non & Cash releasing return of **£3.6m** after 5 full years of deployment
- Other cash releasing, societal and qualitative benefits to be realised too

Future Plans



We are keen to progress things even further and have outlined some plans for growth and development including the below

We're currently in talks to become a CofE for Devon ICS. No other trust in Devon is currently utilising RPA so it makes sense for us to assist and expedite them by imparting our existing knowledge

We've been asked by UI Path to become their NHS Autopilot site moving into 2024

We're currently investigation the need and benefits of Microsoft Co-Pilot

We've had the UiPath Document Understanding training in October '23 and already have identified a major potential area to utilise this (Clinical coding)

