

INNOVATION BY THE NHS FOR THE NHS



Innovation and
Intelligent Automation

Making Time Matter
with Intelligent
Automation

Making Time Matter

Robots will wipe out humans and take over in 'just a few centuries' warns Royal astronomer

A ROBOT uprising could be closer than ever predicted - according to royal astronomer Sir Martin Rees, who believes machines will replace humanity within a few centuries.

By **SOFIA PETKAR**

PLURI USHERD: 06:10 Tue Apr 4 2017 | UPDATED: 08:29 Tue Apr 4 2017

Humanoid robots will 'take over the world' and professor warns we won't be able to spot them

Robotics expert Noel Sharkey says androids will soon be completely integrated in society working as shop assistants, bar staff and careworkers

More than 70% of US fears robots taking over our lives, survey finds

As Silicon Valley heralds progress on self-driving cars and robot carers, much of the rest of the country is worried about machines taking control of human tasks



NHS

Royal Free London
NHS Foundation Trust

Demonstration from Digital Exchange

world class expertise  local care

Process Studio - Edit - Letter Translation Prototype

File Edit View Tools Debug Help

Zoom 150% Segoe UI 10 B I U

(0) Errors Find Text Dependencies

Pointer Expression: Store In:

Main Page Open Letter Get Data

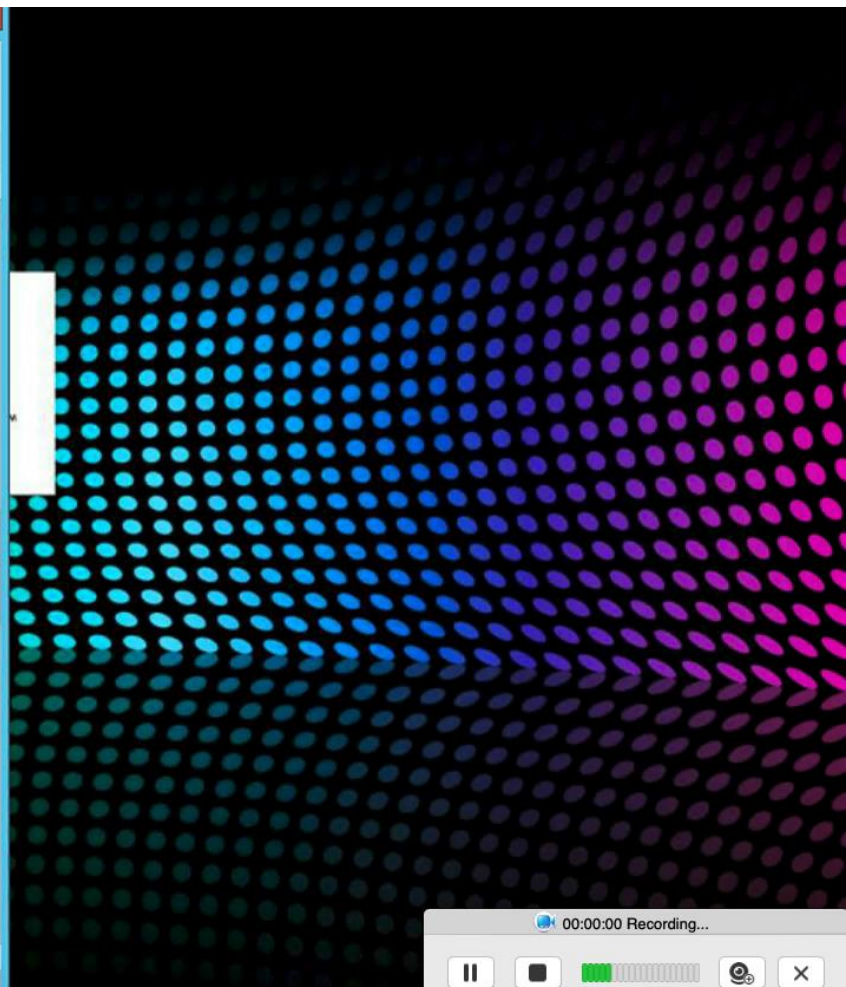
Letter Translation Prototype
This is a prototype to translate a patient document

created by operator at 10/12/2019 6:32:09 PM
last changed by operator at 10/12/2019 11:18:09 PM

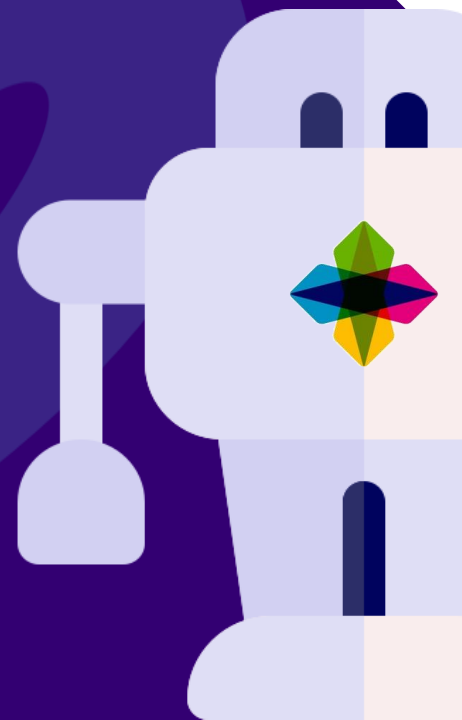
```
graph TD; Start([Start]) --> OpenLetter[/Open Letter/]; OpenLetter --> GetData[/Get Data/]; GetData --> End([End]);
```

Left sidebar menu items:

- Link
- Block
- Process
- Page
- Action
- Decision
- Choice
- Calculation
- Multi Calc
- Data Item
- Collection
- Loop
- Note
- Anchor
- End
- Alert
- Exception
- Recover
- Resume



Case studies: Intelligent Automation services



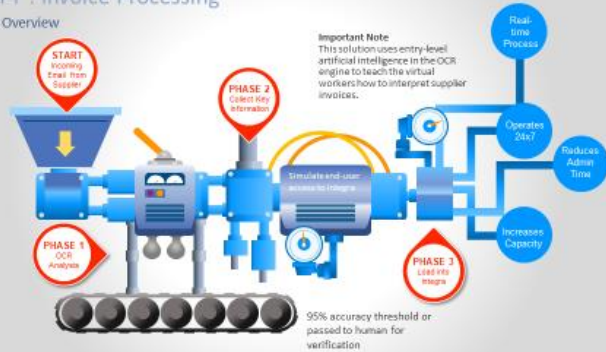
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How are Robots helping us?

600+ Processes – By the NHS for the NHS – Corporate and Clinical across the whole ICS

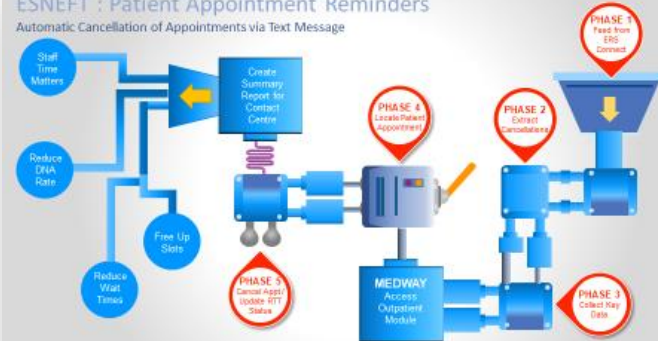
ESNEFT : Invoice Processing

Process Overview



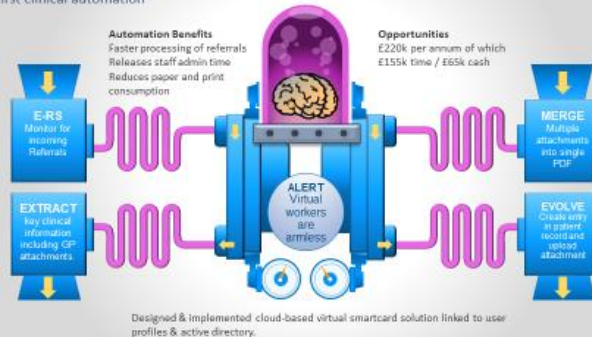
ESNEFT : Patient Appointment Reminders

Automatic Cancellation of Appointments via Text Message



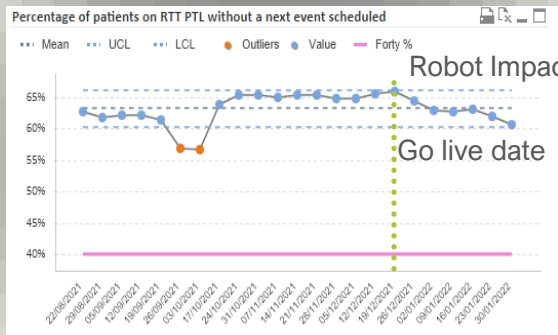
ESNEFT : E-Referrals into Evolve

Our first clinical automation



300,000+ HOURS
155+ FTE
12 MONTHS

What does this mean for teams and patients?



Referral Upload	Automated Referral Upload and Modification	Yearly	Av time (mins)	Yearly time (mins)	WTE
	Average number of eRS referrals (week)	2728			
	Increase to robot effectiveness	60%			
	# referrals no longer needing manual intervention	-81849	5	-409200	-4.94



- 6 FTEs redirected from referral uploads to patient booking
- No same day cancellation for patients
- Business exception rate <4%
- Resource ready to onboard CAS/RAS/PIFU
- Process being rolled out for 2 week cancer wait patients

WHERE NEXT...

Recent service led workshop identified 23 workflows suitable for automation = 130,000 admin hrs saved

NLPSS Recruitment RPA in 2022

Key Achievements

- ✓ 18 RPAs live for all partners (19th RPA due for completion by the end of 2022)

Out of the total RPAs:

- ✓ 5 new RPA processes for HEE RPA delivered simultaneously with implementing new ways of working
- ✓ 3 ID/RTW checks RPAs adapted and re-introduced for post COVID-19 arrangements
- ✓ 2 RPAs implemented to support newly introduced Trac new starter e-forms
- ✓ 50% were existing RPAs enhanced and deployed to all partners, and 50% were new developments



List of RPAs

General Recruitment & HEE Rotations

Create e-files

Conditional Offer Letter NLPSS External

Conditional Offer Letter NLPSS Internal

Virtual ID/RTW checks – guest links

Virtual ID/RTW checks - downloads

Virtual ID/RTW checks – chasers

Professional registration checks

New starter e-forms download

Applicant & Manager Satisfaction Surveys

Zip files

Send files to customers

HEE Rotations

HEE Rotations - saving trainees spreadsheets

HEE Rotations - update HEE trainees master spreadsheet

HEE Rotations - upload new HEE trainees to Trac

HEE Rotations - send contracts to new starters

HEE Rotations - send contracts to HEE rotators

HEE Rotations - payroll hire for rotators

HEE Trainee Satisfaction Surveys



NHS MAIL FOR CARE HOMES



Over 18,657 applications verified and processed saving over 1500 hours of admin time, improved data quality and faster turnaround times.

ICELAND SHOPPING DELIVERY SLOTS



Over 1m home shopping delivery vouchers were delivered to 27,099 social care organisations across England

NATIONAL AUTOMATIONS



Supporting the NHS – By the NHS for the NHS

NHS Centre of
Excellence

Supporting 68
organisations across
the UK

28 National Awards

Secondary Care	<div data-bbox="884 205 1079 270">Mid Essex Hospital Services NHS Trust</div> <div data-bbox="1107 205 1282 270">Guy's and St Thomas' NHS Foundation Trust</div> <div data-bbox="1309 205 1493 270">Moorfields Eye Hospital NHS Foundation Trust</div> <div data-bbox="1520 205 1696 270">The Leeds Teaching Hospitals NHS Trust</div> <div data-bbox="1723 205 1879 270">Liverpool Women's NHS Foundation Trust</div>
Primary Care	<div data-bbox="871 347 1213 472">South East London CCG digital first Connected Primary Care</div>
Ambulance	<div data-bbox="852 496 1238 662">NHS Northern Ambulance Alliance</div>
Mental Health	<div data-bbox="884 701 1199 810">NHS Camden and Islington NHS Foundation Trust</div>
County Council	<div data-bbox="1520 295 1696 361">NHS Royal Surrey NHS Foundation Trust</div> <div data-bbox="1723 295 1879 361">University Hospitals of Derby and Burton NHS Foundation Trust</div> <div data-bbox="1520 388 1696 454">NHS Alder Hey Children's NHS Foundation Trust</div> <div data-bbox="1723 388 1879 454">United Lincolnshire Hospitals NHS Trust</div> <div data-bbox="1520 481 1696 547">NHS Norfolk and Norwich University Hospitals NHS Foundation Trust</div> <div data-bbox="1723 481 1879 547">Blackpool Teaching Hospitals NHS Foundation Trust</div> <div data-bbox="1520 574 1696 639">NHS Nottingham University Hospitals NHS Trust</div> <div data-bbox="1723 574 1879 639">Great Ormond Street Hospital for Children NHS Foundation Trust</div>

By the NHS for the NHS

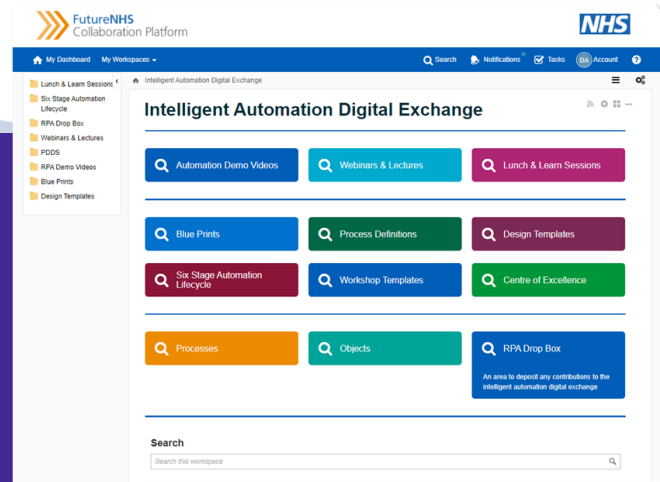
The NHS DX, Consultancy Services – “by the NHS for the NHS”

The NHS Digital Exchange contains **over 50 artefacts that will accelerate deployment of RPA** throughout the NHS.

RFL lead the DX and with advanced technical knowledge that can **support NHS organisations** across the UK to re-purpose and deploy the existing library **through consultancy**.

RFL lead and host the NHS automation leaders forum, promoting collaboration and offering services from within the RPA community.

For common processes (e.g. GP Referrals in PAS/EPR), a **rapid deployment consultancy model** can be developed that will give organisations the ability to mobilise at **pace**.



Matthew Gould
@matthewsgould

This is a brilliant example of innovation at the NHS frontline, and a determination to share best practice. We will know we are winning when this approach becomes the norm.



Intelligent Automation in Health

#somethingincredible – sharing real world experiences

Some examples of automation in healthcare as well as offering helpful advice, webinars and videos.



Automation Forum - Berlin



Team Strategy Days



Something Incredible Blog



VOCAL Council



Automation Café Live



NHS RPA Live in London



INNOVATION BY THE NHS FOR THE NHS



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UK Authority