



# Post marketing adverse event follow-up automation

Alex Karamychev, Patient Safety Manager,  
AstraZeneca

11 June 2024



## Disclaimer

The views and opinions expressed in the following PowerPoint slides are those of the individual presenter and should not be attributed to AstraZeneca, its directors, officers, employees, volunteers, members, chapters, councils, Special Interest Area Communities or affiliates, or any organisation with which the presenter is employed or affiliated.



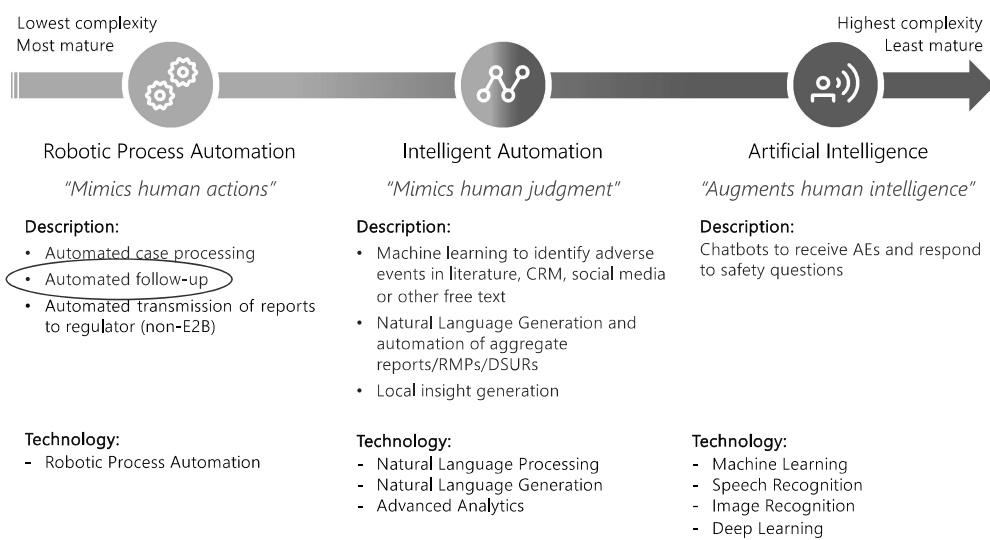
# Agenda

- Robotic process automation – what is it and what is it not
- What exactly has been automated?
- Operating principles
- Results and future improvements









## Next Generation technology spectrum

Robotic Process Automation is not Artificial Intelligence or Machine Learning, though it sits on the same spectrum of “Next Generation” technologies for Operations Transformation



# Robotic Process Automation

RPA is...	RPA is not...
 Computer-coded software	 Walking, talking, production line auto-bots
 Programs that replace humans performing repetitive rules-based tasks	 Physical machines processing paperwork
 Cross-functional and cross-application macros	 A system implementation, Artificial Intelligence, or voice recognition software

Robots can be taught to automate processes comprising of a wide range of rules-based activities, working across multiple systems, databases, and applications, e.g.

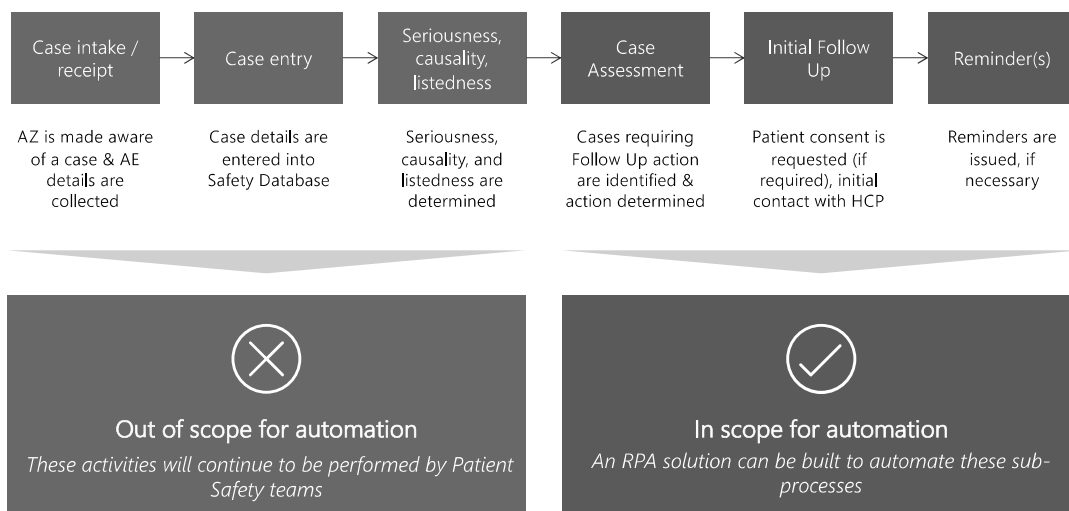
- ✓ Logging into web / enterprise applications
- ✓ Making decisions based on defined logic
- ✓ Running reports
- ✓ Copying and pasting
- ✓ Navigating between multiple systems or programmes
- ✓ Making calculations
- ✓ Extracting structured data
- ✓ Reading / writing to databases
- ✓ Filling in forms / data fields
- ✓ Sending emails
- ✓ Moving files and folders
- ✓ Locating, downloading, and editing templates



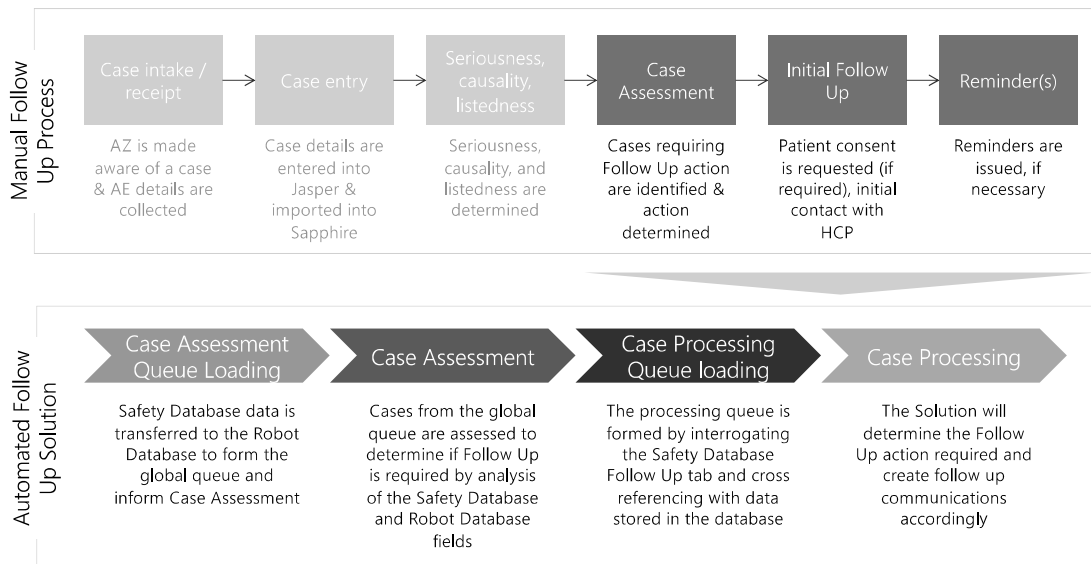


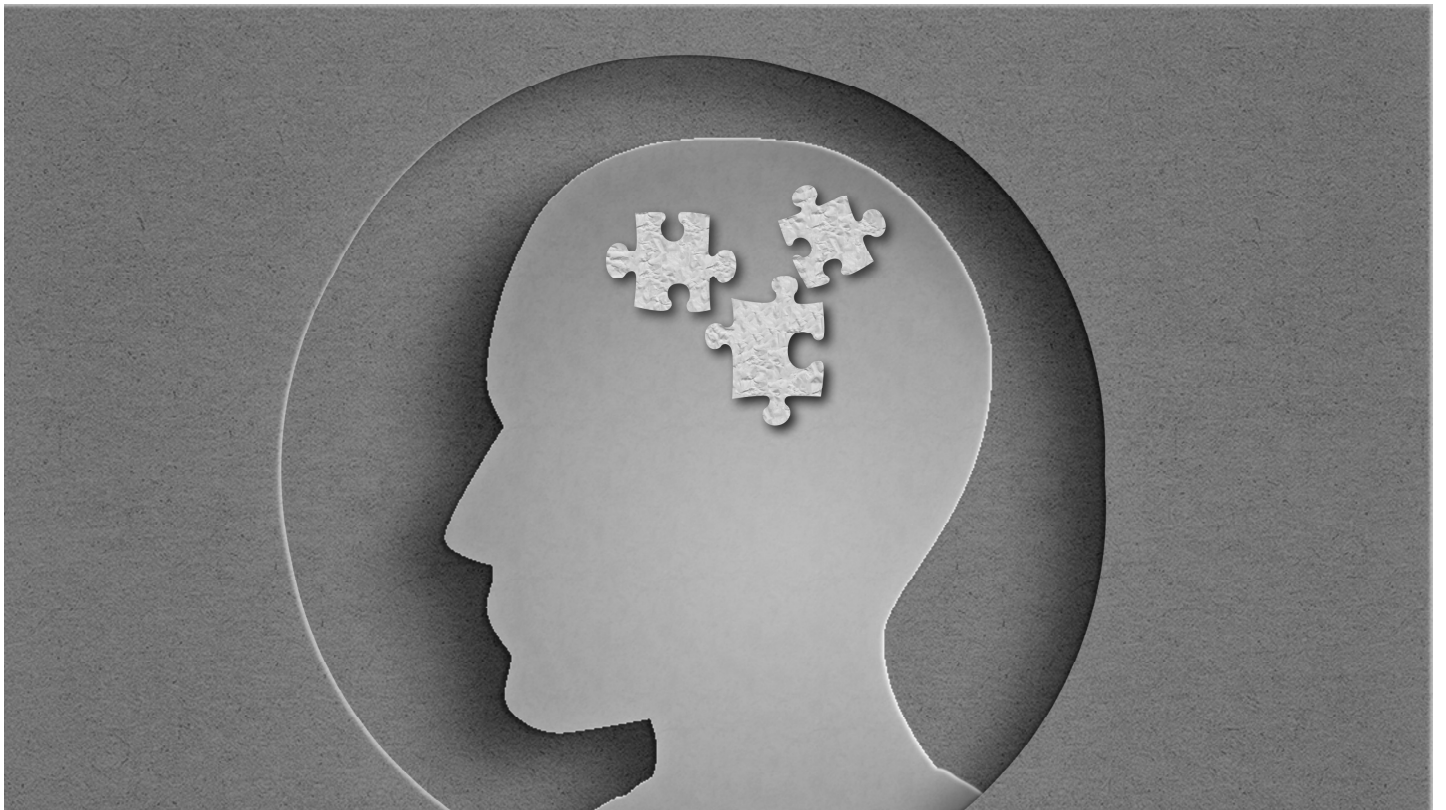
## Overview of AE Follow Up process (as-is, manual)

- AZ has an ambition to increase automation in Patient Safety. Post-Marketing AE Follow Up was identified as the primary target process. Three sub-processes can be automated.



# The end-to-end process





## Operating principles of the Automated Solution

The Solution has been designed and built in order to operate according to the following principles

- The Solution follows a Global Standard Process – compliant with the applicable SOPs
- The Solution has been configured to run independently on a daily schedule and will create an audit trail of all actions
- The Solution will flag any cases with issues for manual handling. The Solution will upload Follow Up letters for posting on a restricted-access central repository



## Standard FU and FU for specific situations

- Standard FU performed using RPA in local language
- Reported terms cross referenced with the term specific questionnaires. FU with a modified questionnaire performed using RPA in English
- FU for some cases with more complicated FU schedules, like pregnancy cases, performed manually



## Improvements to be implemented

- Pre-filling fields in the questionnaires with known data
- Tailor standard questionnaires based on case seriousness / event expectedness

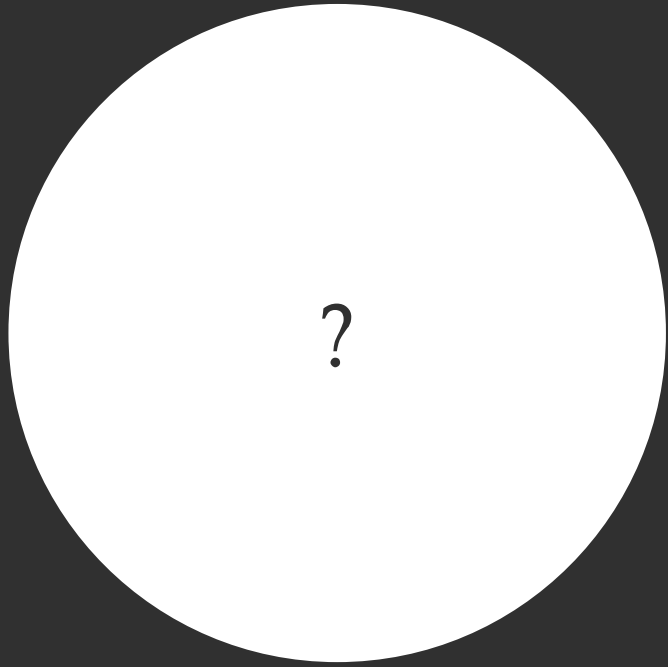


## Results

- Continuous improvement
- Gradual implementation regionally/globally
- Manual checks
- Return rate increase of 5-6% in initial phase. This appears to be the result of increased speed of sending out the FUs.







**Confidentiality Notice**

This file is private and may contain confidential and proprietary information. If you have received this file in error, please notify us and remove it from your system and note that you must not copy, distribute or take any action in reliance on it. Any unauthorized use or disclosure of the contents of this file is not permitted and may be unlawful. AstraZeneca PLC, 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, UK, T: +44(0)203 749 5000, [www.astrazeneca.com](http://www.astrazeneca.com)

