

## Case Study

# NHS Lothian

### CUSTOMER PROFILE

Government

### WEBSITE

[www.nhslothian.scot](http://www.nhslothian.scot)

### LOCATION

United Kingdom

### BUSINESS NEEDS

- Reduce clinical backlog
- Improve service quality
- Improve processing speed
- Improve accuracy

### NICE SOLUTION

- NEVA Assist – Attended Automation
- NEVA Unattended – Robotic Process Automation

### THE IMPACT

- 50% reduction in end-to-end triage time
- 27% reduction in unnecessary appointments
- Freed healthcare staff for more value-added tasks
- Improved patient experience with shorter wait times
- Provided process intelligence for evaluating digital transformation
- Inspired process automations across the authority and beyond

### ON THE NICE SOLUTION

“NEVA saves clinicians considerable time and effort, reducing unnecessary appointments and improving the patient experience.”

Klaudia Bielecki  
Senior Project Manager  
NHS Lothian



## NICE Automation Optimizes Triage for the Second Largest Health Authority in the UK

### ABOUT NHS Lothian

NHS Lothian, the second largest Health Authority in the United Kingdom, provides a comprehensive range of primary, community-based and acute hospital services for the populations of Edinburgh, Midlothian, East Lothian and West Lothian. In addition, for patients in the wider region of the southeast and across Scotland, it provides specialist services that include liver and kidney transplantation, neo-natal intensive care, cancer services and complex surgery. NHS Lothian operates 21 hospitals, 126 GP practices, 180 community pharmacies, 173 dental practices and 112 ophthalmic practices, with an annual budget of 1.6 billion pounds and approximately 26,000 employees.

### THE GOAL

The effects of the Covid-19 pandemic accelerated the need for innovative and transformative solutions throughout the United Kingdom's healthcare system. The NHS saw increased pressure on service providers, a sudden shift to more remote support, and the impact of an aging population, all of which affected patient experience. In the Lothian region, with the second largest residential population in Scotland, patients could be waiting for up to 52 weeks before seeing a gastroenterology specialist.

## Case Study

NHS Lothian receives approximately 16,000 new gastroenterology referrals from general practitioners or other primary healthcare professionals every year. Triage for these referrals goes through the Gastroenterology Department at Western General Hospital in Edinburgh, where six consultants handle between 30 and 40 such cases each day. In addition, over the past three years, the department has noted an increase in urgent suspected cancer cases, highlighting the need for precise and efficient triage.

In order to address the gastroenterology appointment backlog, NHS Lothian undertook to improve referral management. This included a focus on triage, which had not been previously considered as a potential target of optimization.

### THE SOLUTION

NHS Lothian considered the option of robotic process automation in meeting its goals of improved gastroenterology referrals management. To this end, NICE designed a pilot project to bring NICE Employee Virtual Assistant (NEVA) into the triage process. The solution, with a proven track record in large-scale government agencies, was selected for its unique combination of attended and unattended automation capabilities.

NEVA provides contextually relevant guidance for NHS Lothian consultants and fully takes over routine, time-consuming administrative tasks in real time.

#### NEVA works with the clinicians

NEVA provides assistance to the NHS Lothian gastroenterology clinicians, enhancing how they handle referrals directly on their desktops.

When a clinical consultant logs in to TRAKCare, the web-based unified healthcare information system used by NHS Lothian, NEVA automatically joins them. The process automation robot first prompts them to enter the e-triage page, where they select a case for review.

Then, the clinician reviews the information received from the patient's primary care provider, just as they had been doing previously. A referral outcome can then be selected, with NEVA automatically offering an easy way to downgrade the case where necessary.

The clinician chooses from standardized, editable templates for an email to the referring general practitioner. NEVA automatically populates the email with all the necessary information, and it is sent where it needs to go. The communication is saved in the NHS Lothian system and the relevant TRAKCare records are automatically updated.

NEVA has essentially eliminated clinicians' wrap-up work, as well as the routine, repetitive, error-prone aspects of filling out medical forms and communicating with primary care providers.

### THE RESULTS

The efficiency and effectiveness NEVA brought to the gastroenterology triage process was very significant, with measurable outcomes that have also had a wider effect within NHS Lothian—and beyond.

- **Faster triage:** The time needed for the end-to-end triage process was reduced by as much as 50%, going from 20 minutes to about 10.
- **More appropriate triage:** Unnecessary appointments were reduced by 27% thanks to greater consistency and increased transparency, including easier communication with general practitioners.
- **Reduced administrative responsibilities:** The healthcare staff can spend more time on value-added activities.
- **Improved patient experience:** Actively managed triage with NEVA results in shorter wait times for patients and reduces waiting lists.
- **Useful intelligence:** There is an automated, consistent, and comprehensive record of what clinical consultants have been doing in the referral process, including how they are using the software and more.

Paul Schofield, Head of Digital Innovation for NHS Lothian commented: "The metrics and impact of the NEVA automation allow us to prove our team's value, which is likely to influence decision-making regarding team funding and size, as well as future projects. And that, in turn, will lead to us delivering more for the organization."

#### The future is underway—and it is inspiring

NHS Lothian is already working on expanding the use of NEVA in support of a broader program of process transformation at the Health Authority. The NEVA solution will be applied to the triage process in the field of ENT pediatrics (pediatric otolaryngology), after a needs analysis of data revealed a very high advice-only triage rate. This represents an excellent opportunity to help ENT clinical consultants reduce administrative time spent on handling those communications and cut long wait times for patients.

As part of the planned introduction of NEVA into other healthcare service areas, NHS Lothian's eHealth Digital Innovation team is setting up an automation Center of Excellence (CoE) in accordance with NICE's methodology. The CoE includes an internal team providing leadership, identifying automation opportunities, and ensuring long-term value realization under NICE's guidance. The goal is to develop in-house expertise, so that the NHS Lothian team can independently implement future NICE automations.

In addition to the potential clinical applications of NEVA, NHS Lothian is investigating the options for automating processes in non-clinical areas, such as Finance and HR. Potential candidates for NEVA automation include scheduling, data sharing, and other internal business processes.

Inspired by the success of NHS Lothian, NHS England will be implementing a proof-of-concept project bringing NEVA automation into the integration of its urgent care contact center (111) with the hospital emergency room (A&E department) system for rapid triage. The goal is to save time and effort in the emergency room and provide better clinical outcomes.

## About NICE RPA

NICE has been setting industry-wide standards in Robotic Process Automation domain for over 20 years. NEVA is NICE's innovative, fully integrated AI-powered automation platform. It unlocks the full power of RPA, combining the best of attended automation with the advantages of RPA and AI-based process discovery grounded in real data and insights. It enables intelligent process optimization while unleashing employees' potential to ensure exceptional customer experiences. We develop and manage our automation suite from a single platform, hold the largest scale automation projects in the market, and are known for driving digital transformation across the enterprise.

[www.nicerpa.com](http://www.nicerpa.com)

