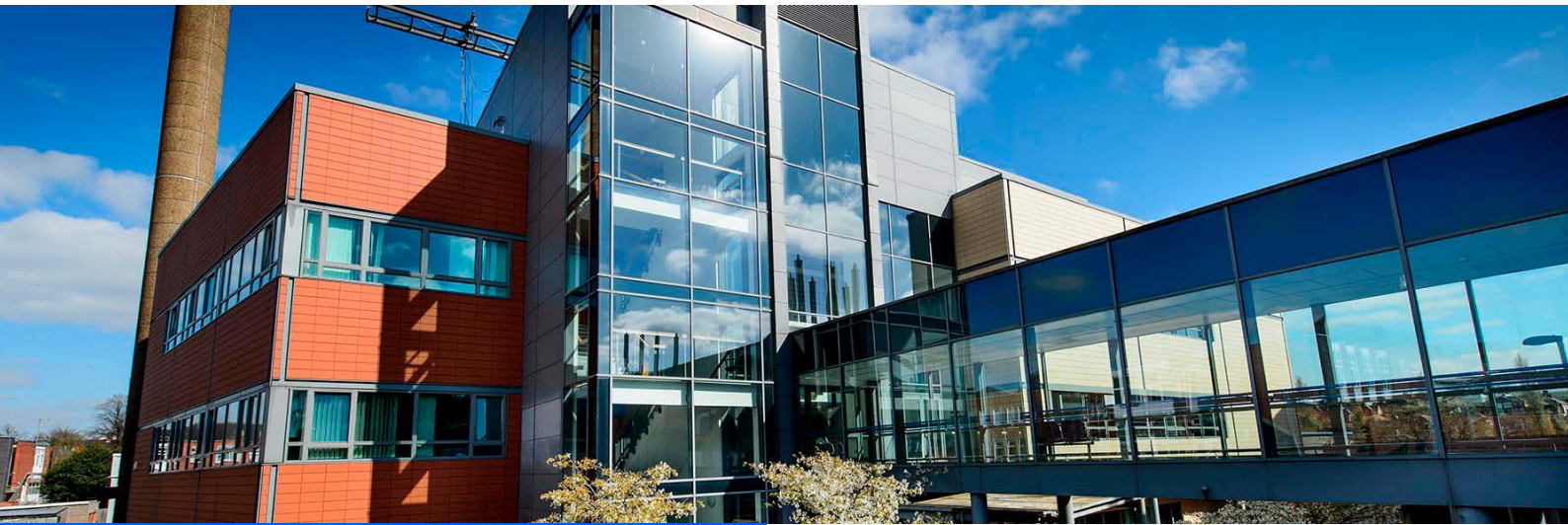




# Turning dose data into actionable insights

Customer story



## Overview:

The Radiation Physics team at Nottingham University Hospitals NHS Trust wanted to better leverage the wealth of equipment and dose data available to them to enhance performance, improve workflows, and strengthen patient safety. To support these goals, Philips invited the team to pilot OneSpace Insights, an enterprise cloud-based analytics solution designed to help healthcare organizations turn complex operational data into actionable insights.

Read on to find out how the collaborative pilot built on a 25 year history of co-creation and collaboration, and resulted in operational improvements including moving from manual processes to immediate reporting, greater visibility into dose trends and equipment performance, faster follow-up on dose outliers and enhanced safety confidence. The pilot has also set the stage for continued and extended collaboration to include workflow optimization and clinical complexity analysis, leveraging both operational data and newly developed models.

At the heart of improving medical procedures and ensuring professional and patient safety sits the discipline of Medical Physics and Clinical Engineering (MPCE). This important healthcare science field applies physics and engineering principles to help provide the effective, efficient, and safe use of advanced medical technology.

Nottingham University Hospitals NHS Trust is one of the UK's foremost teaching and research facilities. Its Medical Physics and Clinical Engineering department spans a total team of 200 and covers the two large teaching hospitals and a multi-site district general hospital. Radiation Physics is a small, highly specialized section within the department of Medical Physics and Clinical Engineering providing support by a core team of 20 experts to departments using radiation both for diagnosis and treatment, along with an R&D Imaging Support Unit that is housed within the section.



### The challenge

With the goal of becoming the most developmental and research focused Medical Physics and Clinical Engineering group in the country, the Nottingham University Hospitals NHS Trust teams are continuously looking to innovate their ways of working to support improved equipment performance, staff and patient safety. For the Radiation Physics team, this included exploring better ways of using the wealth of equipment utilization data and dose data they were collecting. The team had identified that their existing systems made it difficult to extract insights efficiently and support safe, data driven clinical practice.

Nottingham University Hospitals NHS Trust has enjoyed a decades-long trusted relationship with Philips. In fact, it was the first UK center to harness Philips Telecardiology, and the relationship continues strongly to this day with the construction of two new Philips Azurion labs. Starting this year, the labs will include all Philips cardiology services, Philips hemodynamic systems and a Philips cardiovascular information system.

This 25-year history has resulted in a strong culture of co-development between the two parties, with Philips OneSpace Insights being a great example. Philips OneSpace Insights is an enterprise cloud-based analytics solution. With a single point of entry through the Philips Customer Services Portal, OneSpace Insights is designed to support healthcare facilities to optimize performance, drive operational efficiency and structure inventory management with uniform views across sites, departments, modalities and vendors, made possible through a suite of six dashboards: inventory, utilization, cybersecurity, service performance, assessment and dose management dashboards.



### Meet Andy Rogers

A former President of the British Institute of Radiology (BIR) and currently Lead Interventional Medical Physics Expert (MPE) at Nottingham University Hospitals NHS Trust (NUH), Andy Rogers is a prominent figure in the field of radiation physics.

In addition to his role at NUH, Andy Rogers was recently a member of an ICRP working group that has published a report on Diagnostic Reference Levels, and was co-opted on to two international WG's looking at quality control of radiological equipment in general (IEC) and angiography imaging equipment [EFOMP] both of which were published in 2024.

He was seconded on to a US NCRP WG on training requirements for fluoroscopists (NCRP Commentary #33) and part of the research team writing EU guidance for Incident Learning Systems (EU Radiation Protection report series #208).

Andy Rogers' current research interests are patient skin dose (adviser to an IAEA international study), and staff dose assessment and optimization in interventional cardiology and radiology.

He is currently chairing a working group within the British Society of Interventional Radiology looking to publish guidelines for radiation protection training in interventional radiology.

### Philips OneSpace Insights six dashboards



**Inventory** - Medical systems' lifecycle insights



**Service Performance** - Uptime and service performance



**Utilization** - System performance monitoring



**Assesment** - Asset status and priority for investment



**Cybersecurity** - Management of security and vulnerability of medical systems



**Dose Management** - Insights into radiation dose

### Co-development in action

Close, positive collaboration between Andy Rogers' team and Philips resulted in key insights and improvement recommendations being openly and effectively shared for implementation.

For example, the Radiation Physics shared ideas and requests to help make the platform even more relevant and easy to incorporate within their daily practice, such as the addition of a bookmark function for quick access to the most used dashboard views.

Robert Champion, Customer Service Manager for Philips comments: "Piloting and co-creating a solution together with a valued customer is a win:win. In this case it led to rapid improvements—such as bookmarks and workflow-oriented dashboard enhancements – to better reflect real customer needs and make the platform even more user friendly. I'd really like to thank Andy and his team for being so generous in sharing their 'live' feedback and knowledge."

This co-development process was valued by both parties with Andy Rogers remarking: "What's been very encouraging about the process of piloting Philips OneSpace Insights was the notice taken of our feedback. This was really impressive and meant it did feel like we were working together on something that was developing. The bookmark feature really got us going!"

"I've told Philips they should call it "One Click" rather than "OneSpace". With Philips OneSpace Insights, we're straight in looking at the things we want to look at."

**Andy Rogers**  
Lead Interventional MPE, Nottingham University  
Hospitals NHS Trust

It sounds like a very simple thing, but it has made a big difference because now, just before a meeting, one of the radiographers can log in to Philips OneSpace Insights and ensure it's all ready to go.

It only takes him 5 seconds to log in anyway but in terms of being able to access the core information, it's immediate. So much so that I've told Philips they should call it "One Click" rather than "OneSpace". With Philips OneSpace Insights, we're straight in looking at the things we want to look at."

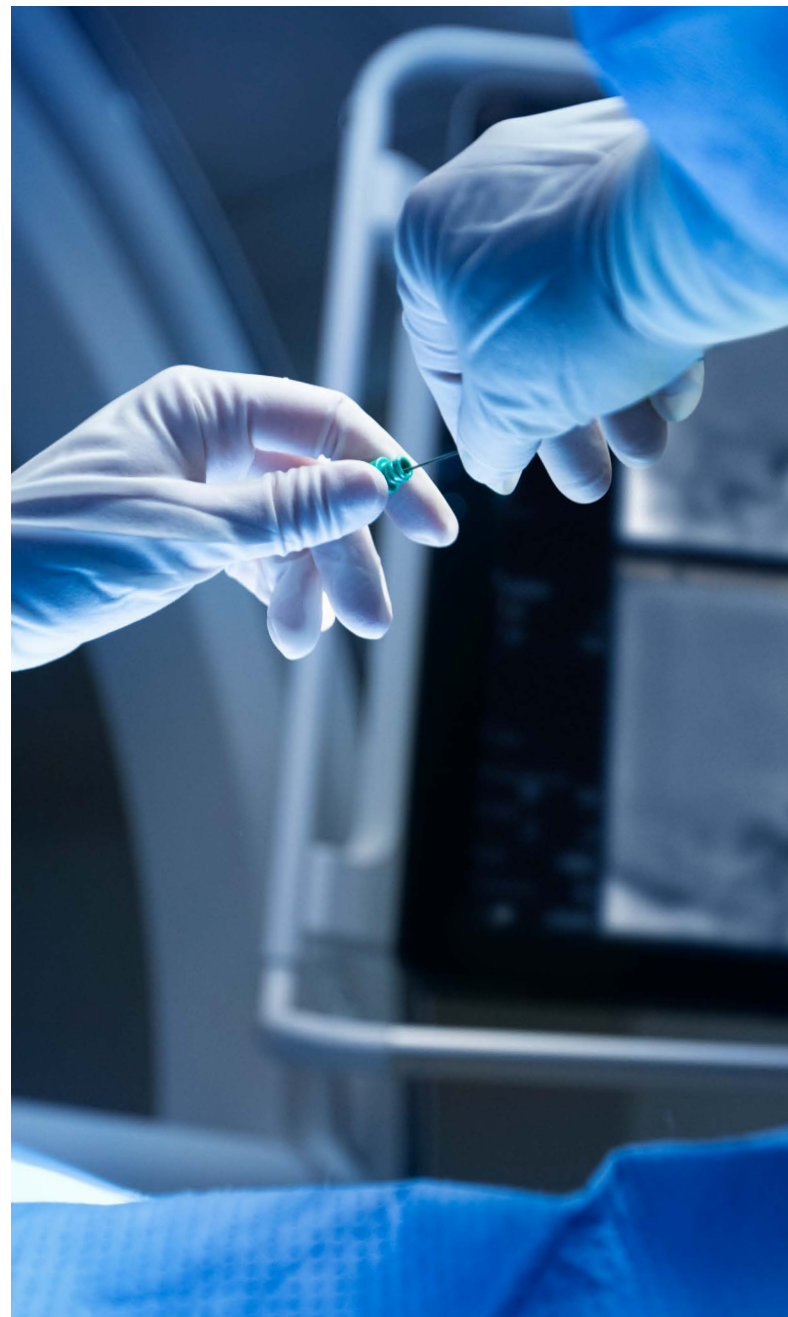
### Improving ways of working:

#### From manual monthly meetings to immediate reporting

Once onboarded, and as the Radiation Physics team had hoped, the Philips OneSpace Insights dashboard enabled the team shift from manual, retrospective reviews to more immediate, data supported operational meetings.

For example, the system made it possible to automatically aggregate the data to show the relevant KPI's. Faster identification and follow up of dose outliers also helped improve feedback loops and strengthened confidence in safety processes.

Andy Rogers explains: "We like to look at patient dose outliers, and we can do this very, very quickly with Philips OneSpace Insights. A key quick win for us was at a click of a button, being able to see the outliers, drill into them and just check if there was any follow up required for tissue reactions or anything out of the ordinary about the case. This enabled us to follow up more immediately, and this brings with it all sorts of benefits. For example, if we can feedback critique sooner rather than later to the cardiologists, then they better understand what happened about that case."



And if it's within the last few weeks, they're going to remember it. If it was six months ago and we were doing an annual survey of outliers, they wouldn't remember.

So, it's the immediacy during an operational meeting of having access to data. That's really the key thing."

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#### **Growing value and future plans**

Looking ahead, the team plans to expand their use of Philips OneSpace Insights into workflow optimization and clinical complexity analysis, leveraging both operational data and newly developed models.

Andy Rogers shares a glimpse of his 2026 plan:  
"This new year, we want to expand that to look at other facets of the service because as far as I understand, we now have the wherewithal to look at more lab usage and how long cases are taking and time. We can start to drill into that data as well, and this starts to build up a rich picture. In fact, one of our radiographers has been tasked with a quality improvement project to use Philips OneSpace Insights to see if he can gain any insights into how to make us more efficient."

The ability to capture data from Philips OneSpace Insights has also piqued Andy Rogers' plans to find better ways to build a better understanding of how outliers can be due to clinical complexity, which is not built into dose analysis today.

He has created a complexity model based on British Cardiovascular Intervention Society (BCIS) audit data to stratify coronary interventions that is ready for publication and has hopes of harmonizing data sources and data entry.

Martine van Alfen, Director Digital Services for Philips comments:  
"As we continue to innovate in the areas of image quality and dose reduction, we are eager to provide customers with the tools to self-evaluate and manage the impact that these innovations have in their daily clinical practice. Seeing is believing, after all!"

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**Martine van Alfen**  
Director Digital Services, Philips



### A foundation for continued innovation

The perceived impact and the peace of mind achieved from adopting Philips OneSpace Insights for the Radiation Physics team has been considerable:

Andy Rogers says: "Essentially, we are doing something we were not doing before. We now have a system that is quicker and more user-friendly so we're using it and we're regularly checking outliers. Have we found anything wrong? Fortunately not. The great thing now is that we can check if appropriate follow-up was done and have the ability to double check independently other repositories of information."

This way we can start to cross reference the data from OneSpace Insights with our repositories e.g. patient dose, follow-ups, incidents etc. So we haven't found anything yet using Philips OneSpace Insights that should have happened but didn't but we have found things that should have happened and did, which is quite good. It's reassuring that Philips OneSpace Insights now gives us that ability to double check independently other repositories of information and in terms of getting time back, helping your, your teams focus on other things."

The shift from pilot to daily practice and beyond, of course, takes time. Looking to the future the Radiation Physics team have plans to go beyond tracking dose alerts to reviewing trends, outliers and event-level data such as system angulations, and using collimation, protocol selection and more, in order to conduct deep root cause analysis.



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While measuring tangible impact is underway, it's clear then that the combined impact—better oversight, quicker follow up, and reassurance through independent data checks— supported through the implementation of Philips OneSpace Insights has set the stage for deeper collaboration and future innovation across imaging, dose, and operational performance.

Interested to learn more?

Let's talk. Even better, let's collaborate

We'd love to collaborate with you to use OneSpace Insights dashboards' capabilities to access insights that help improve operations.

[www.philips.com/onespace-insights](http://www.philips.com/onespace-insights)

