

Follow-up management can be overwhelming. Losing track of follow-up recommendations is not only dangerous for patient outcomes—it can damage the important relationship between a health care provider and a patient. Fortunately, 1QBit has developed and validated an easy, intuitive way to minimize these kinds of errors using state-of-the-art natural language understanding (NLU) methods. Merlin is a quality-assurance tool that automatically detects recommendations for follow-ups in radiologists' reports.

Combining binary classification and entity-extraction models for follow-up identification, Merlin detects whether a radiologist **recommended a follow-up**, and, if so, recognizes the **type** of follow-up exam, the **part of the body** concerned, and the recommended **date for the exam**. Merlin has been validated in its ability to interpret proposed follow-up durations and detect and understand recommended exam types. Merlin is now available for purchase and deployment, ready to improve your clinical workflow.



NLU IN HEALTH CARE IMPROVES OUTCOMES

Natural language understanding uses neural net-based models for training and understanding the context of the text being processed. NLU is able to analyze and understand an entire radiology report and produce an accurate result that will help clinicians provide world-class care and improve patient outcomes. Negations, uncertainty, and irrelevant summarization are not a problem for Merlin, which identifies recommendations stated in the report and presents findings using standardized labels. Merlin, a trusted partner in radiology, ensures that patients receive the follow-up care they need.



To learn more about integrating Merlin into your clinical practice, visit [1QBit Health Care](#), or contact us at healthcare@1qbit.com.
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INNOVATIVE SOLUTIONS FROM A WORLD-CLASS TEAM

As a global leader in quantum software and AI, 1QBit is uniquely positioned to provide advanced health care solutions. Our seasoned group of health care experts, machine learning scientists, and software developers are passionate about creating tools that empower frontline care workers with scalable intelligence. By integrating leading-edge technology and rigorous science, 1QBit sets a new standard on how diagnostics and treatment are performed worldwide.