Telefónica Tech UK&I
AI Design Win Scenarios

Diagnostic Decision Support

Business Challenge

Accurate and timely diagnosis is crucial in healthcare, yet the process can be hindered by incomplete patient histories, fragmented data across different systems, and the sheer volume of information that needs to be reviewed. The wealth of data available isn't leveraged to maximum capacity. Physicians make diagnostic inferences and propose treatment plans based on experience, which could be augmented by AI recommendations (chosen to accept or reject)

How AI can help

AI, leveraging large language models and machine learning algorithms, can analyze vast amounts of EPR and patient history data to highlight potential diagnoses, based on patterns and correlations found in the medical history and current symptoms of **this patient** as well as **all patients**. Proactively generate a prospective diagnosis, validate a diagnosis, and suggest potential treatment options using historic outcomes and current literature. This support can be provided through a standalone application or embedded within existing EPR systems.

Expected Outcomes

- **Improved patient outcomes**: Integrating AI-driven diagnostic decision support tools into clinical practice can enhance the accuracy and speed of diagnoses
- **Treatment success**: Clinicians can make more informed decisions based on previous treatment efficacy using patient history and outcomes from similar patients;
- Reducing system drains: Increasing first-time-right diagnosis, e.g. catching severe cases / diagnoses like 2WW early, can reduce unnecessary delays

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Key Contacts

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Marketplace Offer

Market Place Offer: AI Innovation Hub: 4-6wk Engagement
Benefits:

1. **Accelerated Innovation:** Rapid deployment of pilot projects to speed up innovation and stay ahead of the competition.
2. **Reusable Architecture**: Deploying the right architecture at the start to maximize investment in Azure AI.
3. **Scalability**: Seamless transition from pilot projects to full-scale production.
4. **Ability to Fail-Fast**: Quickly identify the validity of data and use-cases to avoid expensive development tasks.
5. **Resilience**: Robust infrastructure balancing agility and stability for enterprise-grade solutions.
6. **Cross-team Collaboration**: Ensuring connection points are implemented from the start with a unified Landing Zone.
7. **Consistent Best Practices and Approach**: Guaranteeing consistent best practices across different AI platform components with an AI-enabled Landing Zone.

NHS Oxford University Hospitals NHS Foundation Trust
NHS Blood and Transplant
St John Ambulance

Marketing

Website Link: AI Proof of Concept | Telefónica Tech UK
Upcoming Events: https://telefonicatech.uk/events/