



# The Future of Healthcare in the Era of Generative AI

**Hadas Bitran**

Partner GM, Health AI

Microsoft Health & Life Sciences R&D



@hadasbitran



hadas-bitran



@hadasbitran



# Generative AI

Generative AI is a form of Artificial Intelligence capable of creating new content, such as images and text.

When used responsibly, this technology has a potential to make tremendous impact on healthcare.



*Empower every person and organization on the planet to achieve more*



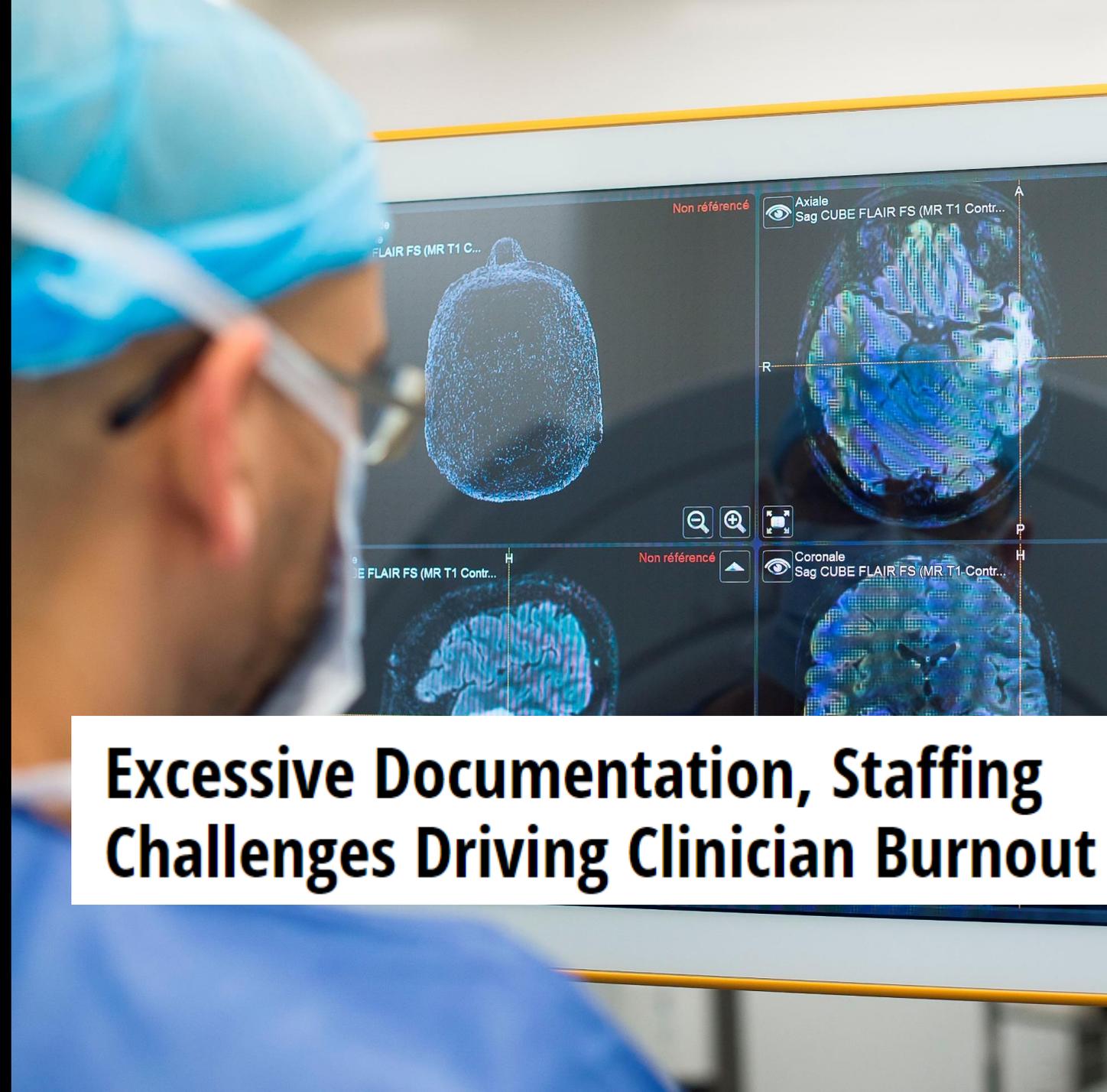
*Ensure that artificial intelligence benefits humanity.*



Clinicians spend 30-50% of their time on clinical documentation.

The burden of Clinical Documentation is the main cause of clinician burnout.

54% of physicians report burnout.

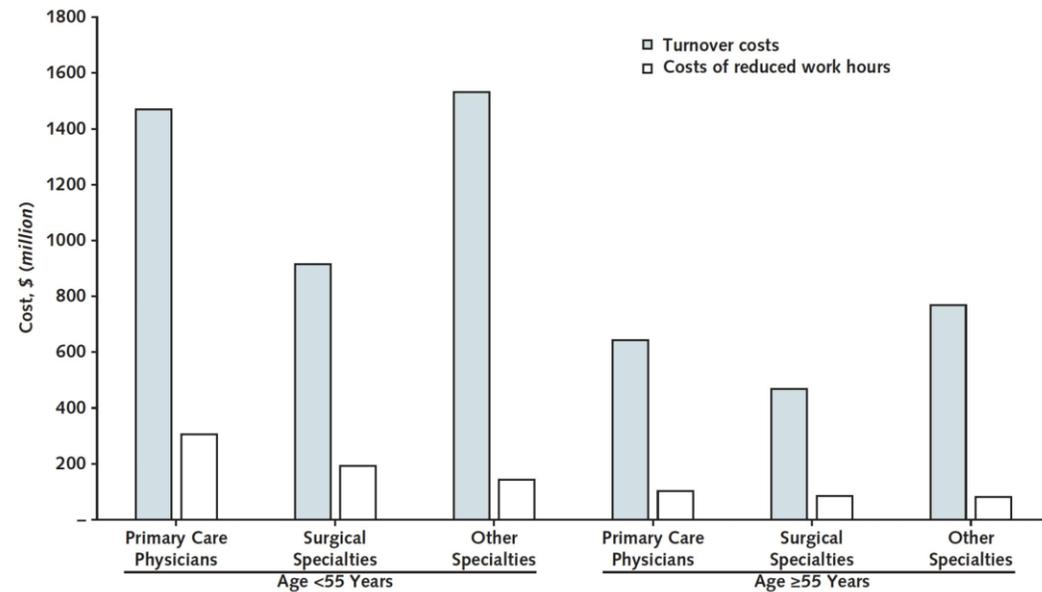


**Excessive Documentation, Staffing Challenges Driving Clinician Burnout**

# The Cost of Physician Burnout

Burnout drives attrition.

~\$4.6 billion in costs related to physician turnover and reduced clinical hours is attributable to burnout each year in the US alone.



# Artificial Intelligence in Healthcare



## Examples



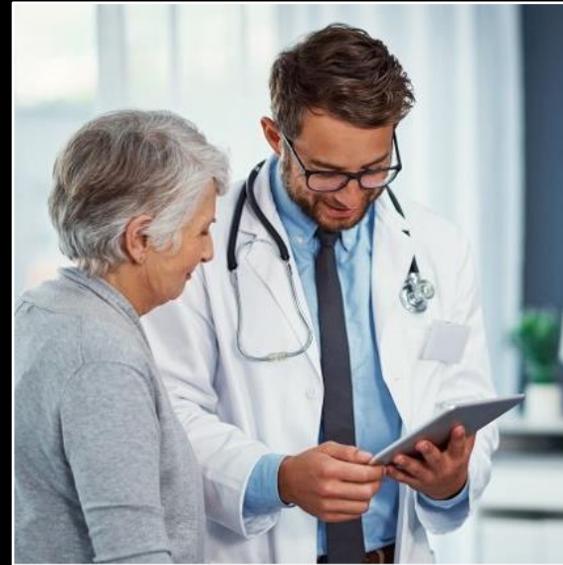
**Engaging  
Patients**

**Copilots in  
Healthcare**



**Empowering  
Care Teams**

**Ambient Clinical  
Intelligence**



**Turning Data into  
Clinical Insights**

**Text Analytics for  
Health**



**Supporting Clinical  
Decisions**

**Azure Health  
Insights**

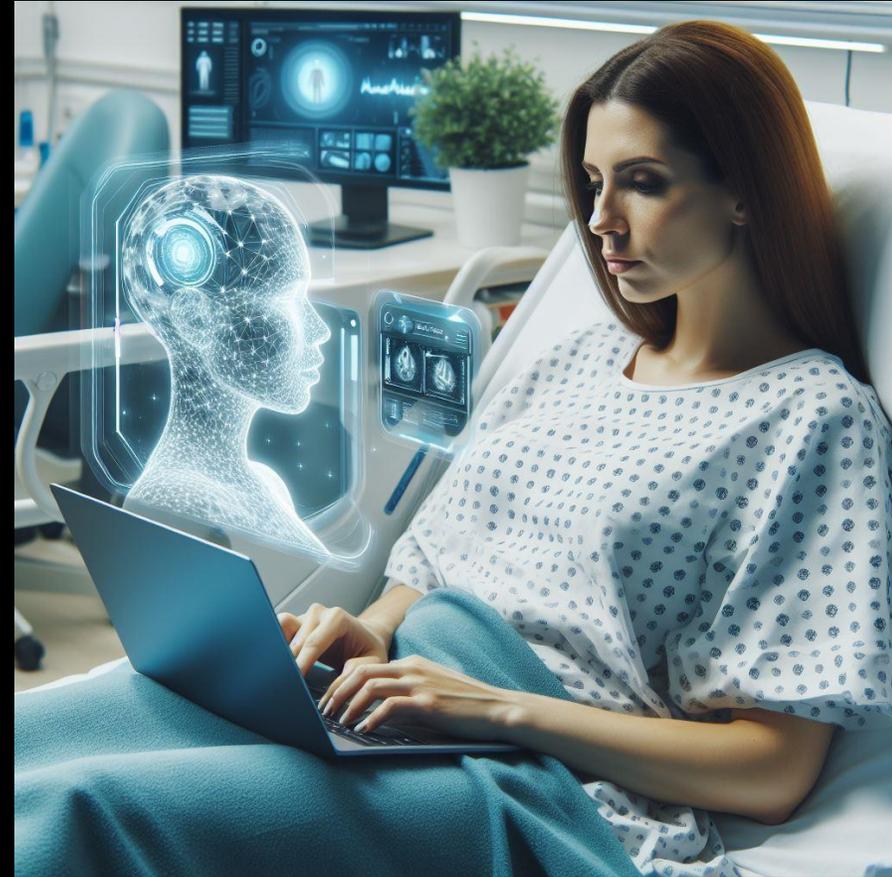
# The Era of Copilots



The LLM era drives demand for GPT-powered Copilots by healthcare organizations



Copilots for medical professionals



Copilots in patient experiences

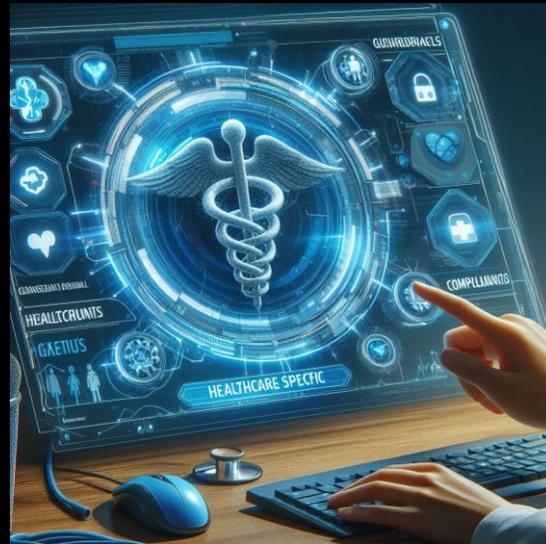
# Copilots in Healthcare



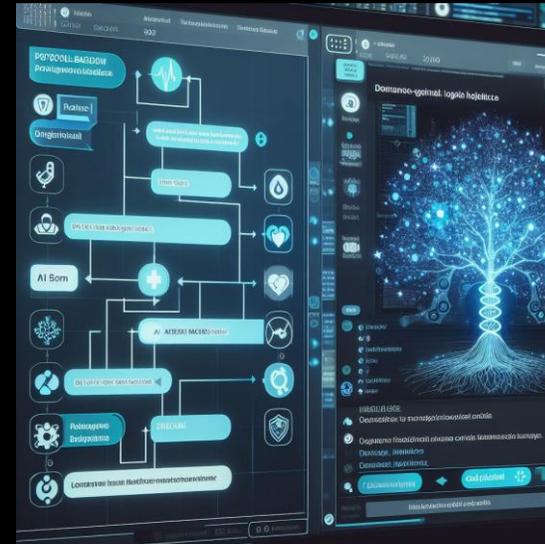
New Copilot capabilities are now available in Preview in *Azure AI Health Bot*, building on Generative AI technologies & a healthcare-adapted copilot stack



Generative Answers based on your clinical sources and websites



Pre-built healthcare credible answers, clinical guidelines, templates, use cases, connectors



Hybrid flows - Protocols side-by-side with Generative AI

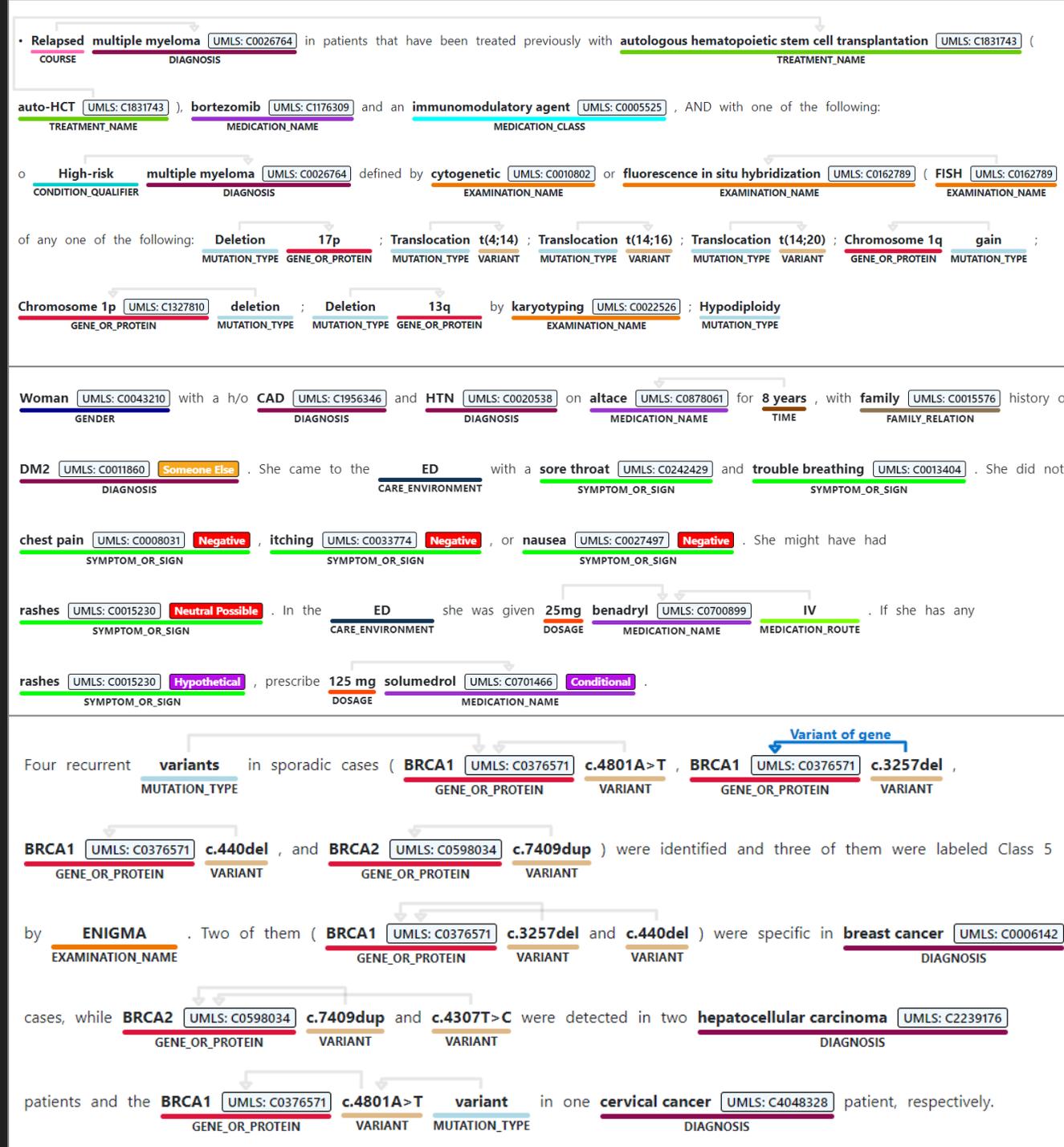


Healthcare-adapted Clinical Safeguards, Chat Safeguards, Compliance Safeguards

# Text Analytics for Health

NLP service for analysis of clinical and biomedical text, enables extracting insights and driving value from unstructured clinical data

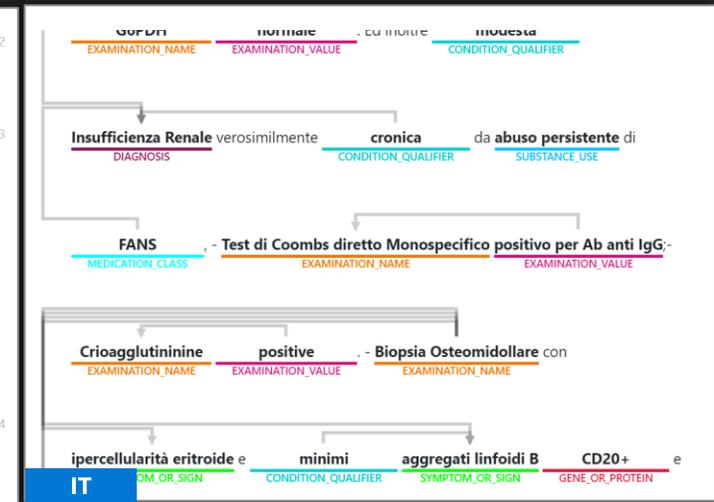
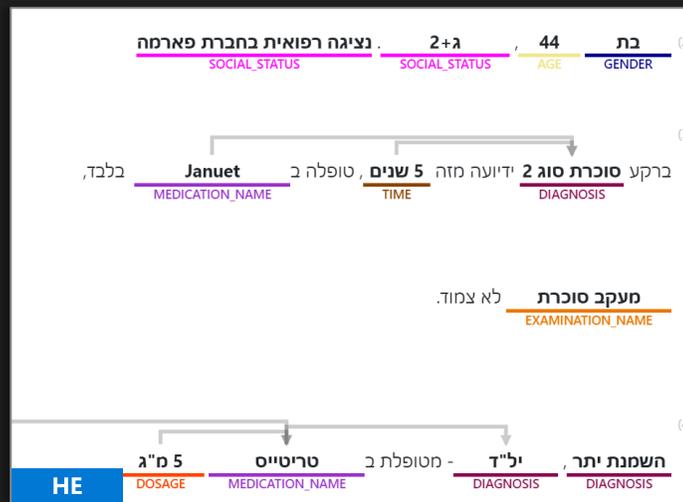
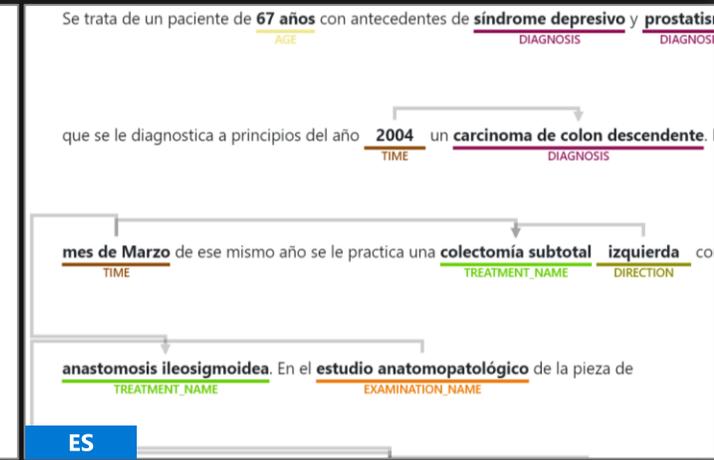
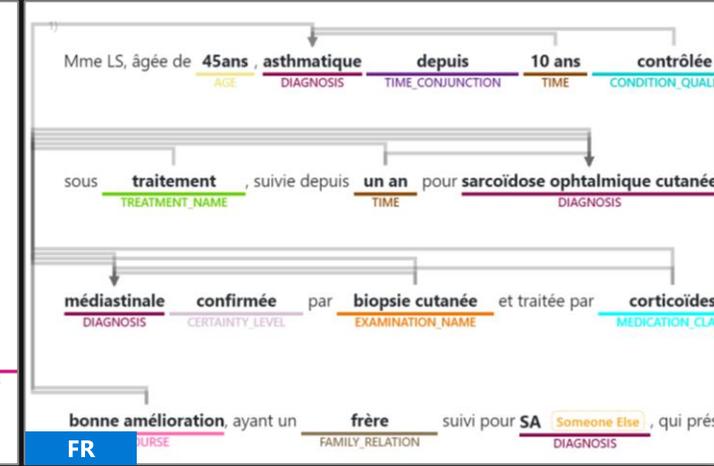
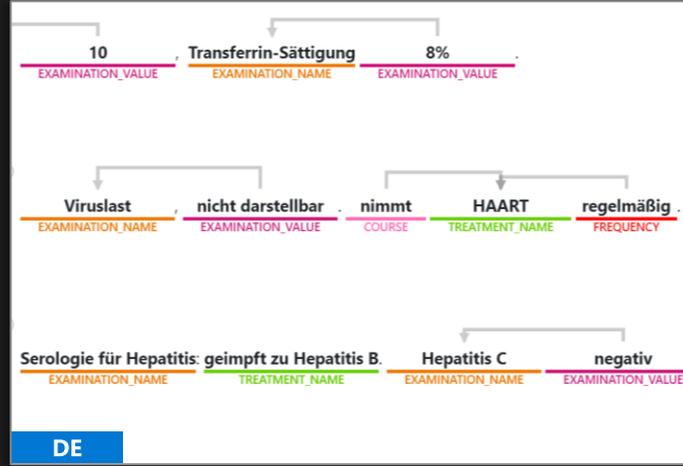
- **Named-entity Recognition:** Identify medical terms and classify to domain-specific entities (~35 types)
- **Entity Linking:** Associate entities with concepts from standard clinical coding systems
- **Relation Extraction:** Extract semantic relations and dependencies between entities (~40 types)
- **Assertions:** Detect negation, likelihood, conditionality, temporality, association and more
- **Structuring into FHIR**



# Multilingual support

Text Analytics for Health is now  
Generally Available in:

- English
- Spanish
- French
- German
- Italian
- Portuguese
- Hebrew



# Microsoft Responsible AI Core Principles

Fairness



AI systems should treat all people fairly

Reliability & Safety



AI systems should perform reliably and safely

Privacy & Security



AI systems should be secure and respect privacy

Inclusiveness



AI systems should empower everyone and engage people

Transparency



AI systems should be understandable

Accountability



People should be accountable for AI systems



# Hadas Bitran

Partner GM, Health AI

Microsoft Health & Life Sciences R&D



@hadasbitran



hadas-bitran



@hadasbitran

Blog:

