

MERLYNN

www.merlynn-ai.com

**TOM in Healthcare / Medical Insurance
Hospital Admission Triage**

TOM in Medical Insurance



The Challenge

Low acuity patients present a challenge for healthcare facilities and medical schemes alike.

Limited resources, (hospital beds, equipment, medicine, funds, medical staff etc.) demand that hospital admission triage is accurate and consistent.

Decisions are highly consequential. Inappropriate declinations may be life threatening, lead to malpractice lawsuits and even loss of licenses, while excessively lenient decisions place undue pressure on already constrained healthcare systems and unnecessarily erode funds.

Existing Process

The complex nature of medical conditions means that at 'pre-admission' stage uncertainty about the eventual diagnosis may exist. To responsibly **navigate decision uncertainty**, medical schemes and healthcare facilities

rely on the knowledge and expertise of teams of experienced nurses and medical directors to make appropriate decisions on whether to 'Admit' the patient or 'Treat as an Outpatient'.

Reliance on Human Expertise in admission triage

Scenarios displaying no/low uncertainty:

In certain admission cases decisions may be 'relatively' straight forward, symptoms are clear, the appropriate decision is evident or easy to discern. In environments where data is readily

available machine learning may be able to provide a prediction (suggest a next best action) with a high degree of confidence. In these scenarios' expertise may or may not be required.

Increasing Uncertainty

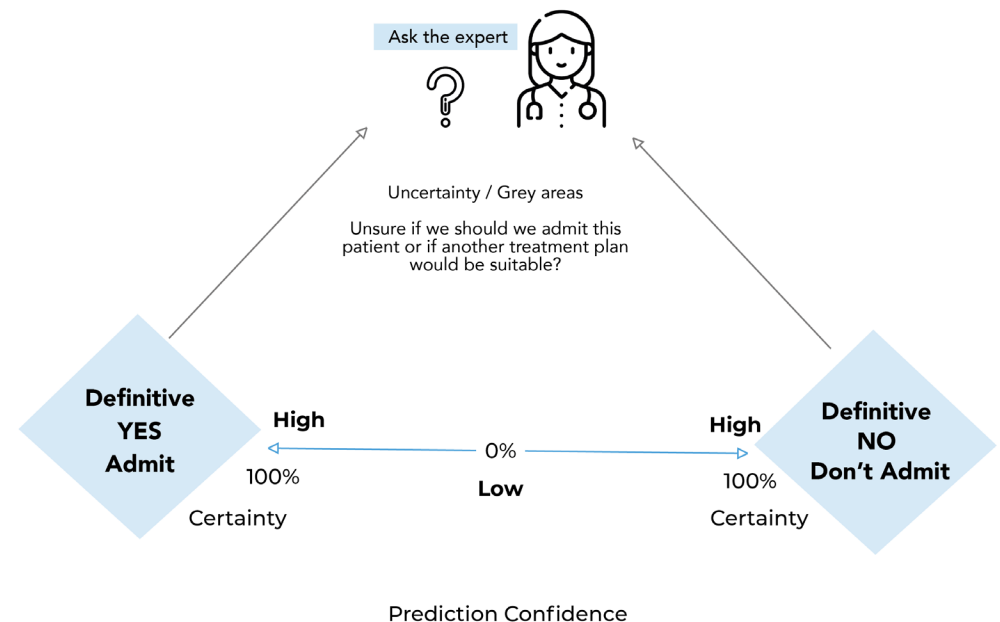
However, as prediction confidence decreases (or in the absence of predictions), complexity enters the equation and uncertainty and risk increases. In these scenarios, human expertise remains relevant to reduce uncertainty (understand and weigh up the impact of multiple factors) and make an expert, informed decision, a judgement call about the next best action.

While human expertise is necessary to manage risk the challenge is two-fold, human capacity is constrained - this leads to delays and bottlenecks in processing. Secondly human expert opinion on the most appropriate course of action may differ, this leads to inconsistent decisions across the system.



Uncertainty & Expertise

As uncertainty increases reliance on human expertise increases.





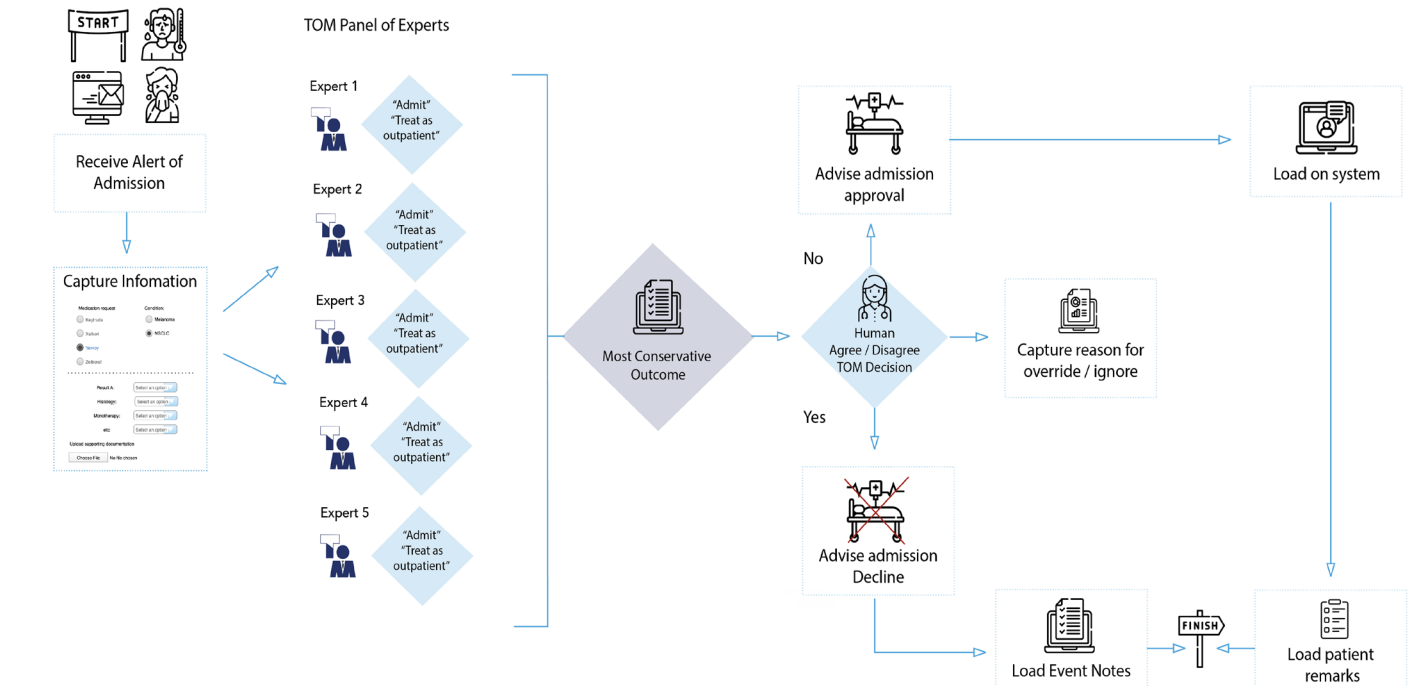
The Solution: TOM™

Merlynn's next generation AI, the **Tacit Object Modeler TOM™** digitally replicates (and scales) human expertise. **Digitized expertise provides more consistent decisions** reflecting the expertise of the organization's top decision makers.

A panel of digital experts can, in real-time, simultaneously provide input & expertise on the most appropriate course of action for patient care enabling healthcare providers and funders to better manage risk. Digitized decisions are also transparent allowing for decisions to be explained down the line to auditors or regulators.



CONCEPTUAL WORKFLOW WITH TOM



TOM is able to replicate complex decisions including tacit knowledge - knowledge gained through experience which is very difficult to explain or articulate and is often described as **"gut instinct"** and intuition.

TOM learns directly from the human expert to understand their decision-making process and requires no historical data to learn.

