

COMPLEX DECISION INSIGHT F1 STYLE

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AS DATA AVAILABILITY INCREASES
BETTER INSIGHT IS NEEDED







INDUSTRIAL COMPLEX SYSTEMS



CASE STUDY: AIR TRAFFIC CONTROL



HUMAN CENTRAL TO DECISION
MAKING:
NEED CLEAR INSIGHT AND
DECISION SUPPORT FOR USER



HEALTHCARE CASE STUDY: PREOPERATIVE BIO- ASSESSMENT

JOINT STUDY WITH
UNIVERSITY OF OXFORD



CARDIOPULMONARY
EXERCISE TESTING:
TO ASSESS RISK OF
POSTOPERATIVE
MORBIDITY



ACTIGRAPHY IN THE HOME AS PROXY FOR HOSPITAL CARDIOPULMONARY EXERCISE TESTING

Risk assessment based on daily measures including

- Time spent walking
- Time spent sitting
- Time spent lying down
- Cumulative sedentary time (sitting/lying)
- Activity score through the day
- Total activity score (based on intensity of movement)
- Max length of a stationary period
- Number of periods of walking over X minutes

Sleep Quality

- Length of time in bed
- Sleep efficiency

Gait analysis

- Gait velocity, cadence
- Step length, number of steps, step time, stride time, stride length
- Left to right asymmetry

