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COURSE BROCHURE

AI in Telemedicine and Remote Patient Monitoring Training Course

18 – 22 April 2027
Muscat

AI in Telemedicine and Remote Patient Monitoring Training Course

Ref: 112_2829 **Date:** 18 – 22 April 2027 **Location:** Muscat **Fees:** 6500 GBP

AI in Telemedicine and Remote Patient Monitoring is a 1-week training course for telehealth managers, nurse leads and digital health product owners, who leave with a Remote Monitoring Service Blueprint. Virtual consultations and home devices now generate continuous streams of readings, and services need algorithms that separate a worrying trend from noise. Jupiter Prime Training delivers AI in Telemedicine and Remote Patient Monitoring for these virtual care leaders.

Why AI in Telemedicine and Remote Patient Monitoring Matters Now

Three forces shape virtual care today: more people living with heart failure, diabetes and lung disease, the spread of wearables and connected home devices, and clinical teams too stretched to watch every reading by hand. A service that tunes its alerts well catches deterioration early and keeps patients out of hospital; one that tunes them badly floods nurses with false alarms or misses the patient who needed a call. The course draws on ISO/IEC 42001 for an AI management system and the NIST AI Risk Management Framework AI RMF.

Who Gains Most from AI in Telemedicine and Remote Patient Monitoring

- Virtual care leads responsible for consultation capacity
- Nursing leads who run monitoring hubs and respond to alerts
- Clinical operations managers who own escalation routes and response times
- Digital health product owners who select devices, platforms and triage engines
- Information governance specialists who protect patient-generated health data

Monitoring hubs that send a nursing lead and a product owner together gain most, since alert design is then settled with the people who answer the alerts.

AI in Telemedicine and Remote Patient Monitoring Capabilities

Participants learn to turn streams of home readings and virtual consultation requests into safe, timely clinical action.

- Design symptom triage flows for virtual consultation requests — booking and triage teams
- Specify device and wearable data pipelines with reading quality checks — product owners
- Calibrate early warning thresholds for chronic conditions — nursing leads
- Build escalation pathways from automated alert to clinician response — clinical operations managers
- Apply privacy and consent safeguards to patient-generated health data — information governance teams
- Calculate outcome measures such as avoided admissions — service commissioners

Key AI in Telemedicine and Remote Patient Monitoring Terms

- Remote patient monitoring RPM — collecting health readings at home through connected devices for clinical review.
- Patient-generated health data — readings, symptoms and activity recorded by patients or their devices outside a clinic.
- Early warning score — a value combining several vital signs to flag deterioration risk.
- Alert fatigue — loss of attention among staff exposed to frequent alarms, many of them false.
- Virtual triage — assessing urgency and routing of a patient request before a clinician sees it.
- Escalation pathway — the agreed sequence of actions and responders that follows an alert.

AI in Telemedicine and Remote Patient Monitoring Day by Day

Day 1: Virtual Care Models and Patient Cohorts

- Telemedicine Service Models — Video, Asynchronous and Hybrid Consultation Choices
- Chronic Condition Cohort Selection — Who Benefits from Home Monitoring
- Hospital-at-Home and Post-Discharge Use Cases — Capacity Planning Decisions
- Wearables, Home Devices and Connectivity Options — Device Portfolio Fit
- ISO/IEC 42001 Scope for Virtual Care — Accountability for Monitoring Algorithms

Day 2: AI for Virtual Triage and Consultation

- Symptom Checker and Triage Engine Logic — Safe Routing of Requests
- Natural Language Intake and Summarisation — Clinician Preparation Time
- Risk Stratification Models — Prioritising Patients for Proactive Contact
- Triage Accuracy Testing Against Clinician Decisions — Go-Live Readiness
- NIST AI RMF Map Function for Virtual Care — Framing Patient Harm

Day 3: Device Data Streams and Early Warning

- Device Data Pipelines and Interoperability Standards — Reliable Reading Capture
- Signal Quality and Missing Reading Rules — When Data Can Be Trusted
- Trend Detection and Anomaly Models — Spotting Deterioration Early
- Personalised Alert Thresholds — Balancing Sensitivity Against Alarm Burden
- Early Warning Scores for Heart Failure and COPD — Condition-Specific Rules

Day 4: Escalation, Engagement and Safeguards

- Monitoring Hub Staffing and Rota Design — Response Time Commitments
- Escalation Pathway Mapping — From Alert to Call to Emergency Response
- Patient Engagement Nudges and Adherence Tracking — Sustaining Device Use
- Consent, Privacy and Data Sharing Controls — Protecting Home Readings
- Outcome Measures for Admissions and Patient Experience — Service Evaluation

Day 5: Practising the Remote Monitoring Service Blueprint

- Cohort and Device Selection Sheet — Applying Day 1 Service Choices
- Triage Routing Rules Draft — Applying Day 2 Engine Tests
- Alert Threshold Matrix — Applying Day 3 Early Warning Methods
- Escalation and Safeguard Map — Applying Day 4 Pathways
- Remote Monitoring Service Blueprint — Peer Challenge and Final Sign-Off

Applying AI in Telemedicine and Remote Patient Monitoring After the Course

- Audit one month of alerts from an existing monitoring cohort, measuring false alarm rates and revising thresholds.
- Map the escalation pathway for one chronic condition with nursing and emergency teams, closing gaps in response ownership.

AI in Telemedicine and Remote Patient Monitoring Questions FAQ

What is AI in Telemedicine and Remote Patient Monitoring and why does it matter now?

It is the use of algorithms to triage virtual consultations and to interpret readings from home devices. It matters now because connected devices produce more readings than clinicians can review by hand.

Which roles gain most from AI in Telemedicine and Remote Patient Monitoring training?

Telehealth managers, nursing leads, clinical operations managers and digital health product owners gain most. Each shapes a different part of the service: triage, alert response, escalation or device and platform choice.

How does AI in Telemedicine and Remote Patient Monitoring differ from a diagnostic imaging AI course?

It deals with continuous home readings and virtual consultations rather than scans or slides. You work on triage engines, alert thresholds, escalation pathways and patient engagement instead of image validation.

What do you bring back from AI in Telemedicine and Remote Patient Monitoring training?

You bring back a Remote Monitoring Service Blueprint covering cohort and device choices, triage routing rules, an alert threshold matrix, escalation pathways and outcome measures.

AI in Telemedicine and Remote Patient Monitoring: The Way Forward

The Remote Monitoring Service Blueprint first informs which patient cohort a service enrols and which devices it issues. Nursing leads, product owners and operations managers use it to agree thresholds and response times. After the first months of live monitoring, alert volumes and avoided admissions are worth revisiting, since thresholds that suit one condition rarely suit another.