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Notes:

## Internet of Things (IoT) Technologies Revolutionary Impact on Healthcare

Technology is swiftly changing the landscape of care and delivery frameworks whereby healthcare organisations can now help patients through the utilization of Internet of Things (IoT) technologies / systems to improve patients' health outcomes and experiences by using rich health data and insights to enable a holistic patient diagnosis. Globally healthcare organisations are unconsciously challenged to keep stride with patient behavior and expectations for digitally mobile and accessible systems of care.

Internet of Things (IoT) technologies has certainly revolutionized the management of patients. This healthcare environment has seen numerous (IoT) applications in healthcare from self-management devices, automated pharmacy dispensers, wearable devices (e.g. fitness trackers, sleep management) remote monitoring to smart sensors keep track of newborns (pediatric and maternity units) and medical device integration. Internet of Things (IoT) certainly has the prospect of keeping patients away from emergency rooms, wards and outpatients clinics whilst safeguarding clinical safety and doctor's treatment and care planning.

However in regards to the management of complex illnesses, Internet of Things (IoT) technologies has stimulated patients to be more active in monitoring their individual health which is of great benefit to the patient family, careers and wider population. The Internet of Things (IoT) Technologies wearable devices which may be worn as a wristband are available to track exercise, sleeping patterns and vital signs such as heart rate, pulse, respirations and blood pressure enabling patients to monitor their own progress or performance, and then transmit their health data back to their healthcare provider for treatment plan and review of care. This is handing patient the keys of "health ownership" and empowering patients to act and take full control of their health whilst healthcare practitioners can monitor conditions and administer appropriate treatment.

There are hurdles for healthcare organisations in regards to the deployment of Internet of Things (IoT) Technologies this includes the lack of interoperability with current patient record electronic system, suppliers accountability for failures, data storage, consent and data sharing, password protections and the management of the multiple connected devices from various suppliers. Other published hurdles are the tremendous quantity of hospital and multiple streams of patient data from various devices and readiness for the hospitals information technology departments to manage data security, compliance with information governance, data regulations and cyber security which are to be risk managed on a daily basis. Despite the hurdles the benefits of fully embracing Internet of Things (IoT) Technologies within healthcare is a welcome advancement in modern healthcare.

## Biography

Michaelene Holder-March, is a goal driven healthcare executive with over 31 years of leadership and training experience. She is also well known and respected in the UK and USA for her professionalism, her vast experience and portfolio of managing Corporate & Clinical Governance, Information Governance, Risk Management, Operations, System Resilience, Claims, Audit and Health and Safety in both the public and private healthcare sector. Michaelene Gail Holder-March is a qualified teacher, nurse & midwife with registrations both in the UK & USA; she also holds a LLB and MBA in Management. She is a strong advocate of hands-on, inquiry based learning, and she actively involves herself in a variety of charitable community service, mentoring /coaching others to follow her lead.

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