Parallel Sessions

PS4.3 3D Printing in Medicine I 16:15 Theatre 1

Application of 3D Printing in Queen Elizabeth Hospital: a New Page of Healthcare Advances

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In the past, clinical staff mostly worked with two-dimensional images to gain insight into pathologies that requiring excellent visualisation skill. The use of 3D printing in medical service has advanced medical practice to a new era. 3D printing allows three-dimensional assimilation of the real physical objects with the use of 2D images, software, and printer. The technology allows clinical staff to make use of patient specific models to provide: (1) surgical planning and trial runs; (2) education and training; and (3) medical device prototyping. The 3D Model Service Development and Strategic Planning Committee (3DSSC) was established in 2016 in Queen Elizabeth Hospital (QEH) under a structured governance involving management and clinical representatives. Goals of the Committee include facilitating innovations and developing skills and competency in using 3D models to enhance training/clinical practice and improve clinical outcomes. In this session, the implementation of 3D printing service in QEH, the overall logistic and production line, applications and treatment outcomes of 3D models in clinical uses, and future directions and implications to our clinical service will be shared.