Routine CXR consumes valuable time and resources (≅$155,000 annually) and rarely affects management. Selection should be guided by clinical factors” Woodland et al (2018).

Abstract:

BACKGROUND: Central venous catheters (CVC) can be useful for perioperative monitoring and insertion has low complication rates. However, routine post insertion chest X-rays have become standard of care and contribute to health care costs with limited impact on patient management.

METHODS: 200 patient charts who underwent pancreaticoduodenectomy with central line placement and early line removal were reviewed for clinical complications related to central line placement as well as radiographic evidence of malpositioning. A cost analysis was performed to estimate savings if CXR had not been performed across routine surgical procedures requiring central access.

RESULTS: In 200 central line placements for Whipple procedures, 198 lines were placed in the right internal jugular and 2 were placed in the subclavian. No cases of pneumothorax or hemothorax were identified and 30 (15.3%) of CVCs were improperly positioned. Only 1 (0.5%) of these was deemed clinically significant and repositioned after the CXR was performed.

CONCLUSION: Routine CXR consumes valuable time and resources (≅$155,000 annually) and rarely affects management. Selection should be guided by clinical factors.

Reference:

Is chest X-ray necessary after ultrasound-guided central venous line placement? | 2

Critical Care. March 28th. 

doi: 10.1016/j.jcrc.2018.03.027.