

PROFITABLE PRODUCTION AND DEPLOYMENT OF COMPUTER BASED TRAINING

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Deployment of Computer Based Training (CBT) in medical education is celebrated for its constant quality, time- and place independency and teacher time extensiveness. The production of CBT material is however considered to be time consuming and expensive. A survey was performed to investigate the reliability of this second statement.

Survey

The survey covered 10 months of Dermatology residency (130 residents) at Leiden University Medical Center. Increasing teaching hours were tackled by deployment of existing CBT and development of Dynamic Patient Simulations (DPS) for self-study. All CBT is accessible over the Internet for time- and place independent user access and central registration of data. CBT was deployed as compelled self-study material, substituting small group teaching and 23 hours of large group sessions.

Results

Residents had 2756 sessions of 24 minutes average with CBT. They spent 1091 hours in total on CBT of which 471 hours on DPS (43 %).

Development of DPS cost 100 hours of teacher time and 600 hours of CBT developer time, a total salary of 25,622 Euro (34551 USD).

Conclusions

Comparing residents with- or without CBT deployment, DPS self-study has saved 4.7 hours on small group and 9.9 hours per month on large group teaching hours. The invested time was paid back after 7 months and is expected to make a five-year profit of 729 hours, a saving of 45,645 Euro (61552 USD) in salary.

Deployment of CBT has facilitated small group teaching setting for residents and has proven to be profitable considering teaching hours as well as financially.