

# IT Troubleshooting Reference Guide for the Family Medicine Residency Program

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## Background

- In our facility, Information Technology (IT) consultations, whether virtual or physical, are likely for one of the following reasons: (1) EMR lockout and functionality; (2) printing connectivity; (3) application login.
  - Based on observation from complaints of residents in the early 2023-2024 academic year.
- The aim of this project is to address these preventable IT problems by providing instructional handouts.
  - No intention to produce new knowledge, but to implement changes to current practice setting.

## Objectives

1. Expedite resolution of common IT issues
2. Reduce the incidence of consultations with HCA Florida St Petersburg Hospital IT department for preventable issue

## Methods

- The tangible outcome of this project were laminated educational handouts (reference guides) addressing common preventable IT issues. The handouts were posted in areas frequented by residents, such as graduate medical education (GME) computer stations as well as St. Petersburg Family Care (SPFC) clinic.
- Easily identifiable laminated paper handouts containing DIY instructions on resolving common IT issues such as EMR navigation, login and connectivity information, printer instructions and designations, as well as contact information of IT professionals were placed in common areas frequently inhabited by residents and physicians.
  - Goal: Address issue and educate on resolving without IT intervention
- An additional laminated card containing a warning to log out of the EMR prior to undocking from a charging station. The card was designed to wrap around a computer cable in a nonobstructive manner while remaining visible.
- Prior to launch, prototype handouts and cards were reviewed for content by the IT department and reviewed for clarity.

## Methods cont.

### Factors that may influence results:

1. Resident proximity to computer stations where handouts are most likely to be posted
2. Experience and length of stay in the residency program
3. Attendance rate at didactic IT workshops
4. Personal technological expertise

- **Data Collection:** Collected by HCA Florida St. Petersburg Hospital IT personnel who logged both virtual and physical encounters with residents for IT issues.
  - Pre-implementation data: number of encounters residents had for IT issues prior to distribution of handouts
  - Post-implementation data: number of encounters residents had for IT issues after distribution of handouts
  - Encounters were tallied and transferred to an electronic spreadsheet on a weekly basis
  - Consult reasons that were analyzed: EMR lockout and functionality problems, printing connectivity and application, application login
    - Unpreventable hardware issues such as file corruption were not accounted for

## Timeline



## Results



Figure 1: IT Consultations made in October and December 2023

## Results

- In the month of October 2023, a total of 3 IT consultations were made by residents. All 3 consultations were Meditech related. No printer or MH Cure consultations were reported. In the month of December 2023, a total of 0 IT consultations were made by residents.
- A net decrease in the total number of IT consultations was observed immediately following the implementation month (November 2023). The most common cause of IT consultation was Meditech functionality [Figure 1].

## Discussion

- The results suggest that implementation of the instructional handout was successful in reducing the number of IT consultations. These results aligned with initial expectations; although, a greater volume of consultations and a greater variety in the reason for consultation were expected.
- The most attributable causes for IT consultation were thought to be due to EMR functionality, printing connectivity, and mobile application login.
- It was uncertain whether the decrease in consultations was related to better acquaintance with IT practice amongst interns (PGY-1s) who were at the 3- and 5-month points of their training, respectively. Additionally, it was uncertain whether the lack of printer-related and mobile-related consultations were due to lower perceived acuity, and subsequently were (1) less likely to be reported to IT and (2) more likely to be resolved by non-IT workers, such as peers or attending physicians.

## Conclusion

- The implementation of simple handouts is effective in expediting resolution and decreasing the frequency of IT consultations for preventable IT issues. Such interventions are inexpensive and easily distributable, and should be used more frequently for learning to navigate new EMRs, printer settings, and mobile applications.