

BACKGROUND

- Invasive candidiasis (IC) carries a large economic burden on the US healthcare system; candidemia is reported to have attributable cost of ~\$40,000 per patient¹
- Although *Candida albicans* continues to be the most prevalent type, both drug-resistant *Candida* spp. and *C. auris* have emerged and been designated by the CDC as serious and urgent threats, respectively²
- Currently, echinocandins are recommended as empiric and/or initial therapy for many forms of IC due to their activity against most *Candida* species and favorable toxicity profile³
- Real-world data on echinocandin use, including indication, durations of use, and appropriate de-escalation, are lacking

OBJECTIVES

- To perform a pharmacoepidemiologic analysis on echinocandin use at two large healthcare systems in Houston, Texas
- To review duration of therapy of echinocandins for positive *Candida* cultures and days to therapy initiation during hospitalization
- To assess echinocandin discharge disposition

METHODS

- All pharmacy administration and clinical microbiologic data for patients hospitalized between 2017-19 at CHI/Baylor St Luke's Medical Center and Memorial Hermann Hospitals were screened for echinocandin use and positive *Candida* culture result
- Monthly days of therapy (DOT) per 1,000 patient days were calculated
- The proportion of echinocandin-treated patients with or without positive *Candida* cultures and the antifungal discharge disposition of the first 350 echinocandin courses were evaluated

RESULTS

Table 1. Echinocandin courses and patients evaluated

| | |
|--|-----------|
| Number of unique patients evaluated | 1,665 |
| Total number of days of therapy | 7,820 |
| Number of patients with positive <i>Candida</i> microbiologic cultures | 842 (51%) |
| Ongoing patient medical chart reviewed for echinocandin discharge disposition (Figure 3,4) | 350 |

RESULTS CONTINUED

Figure 1. Echinocandin DOT per 1,000 patient days (2017 -2019)

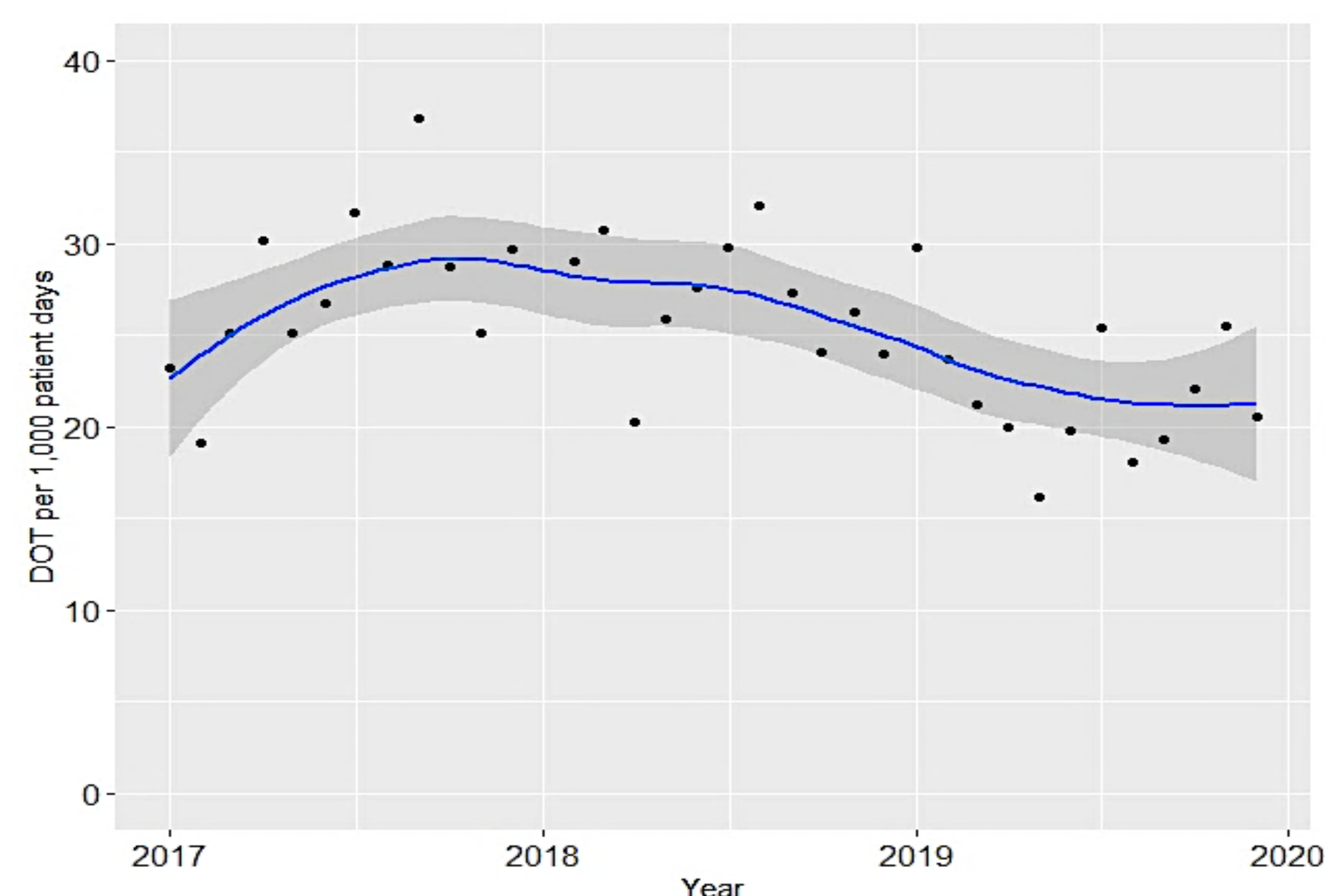
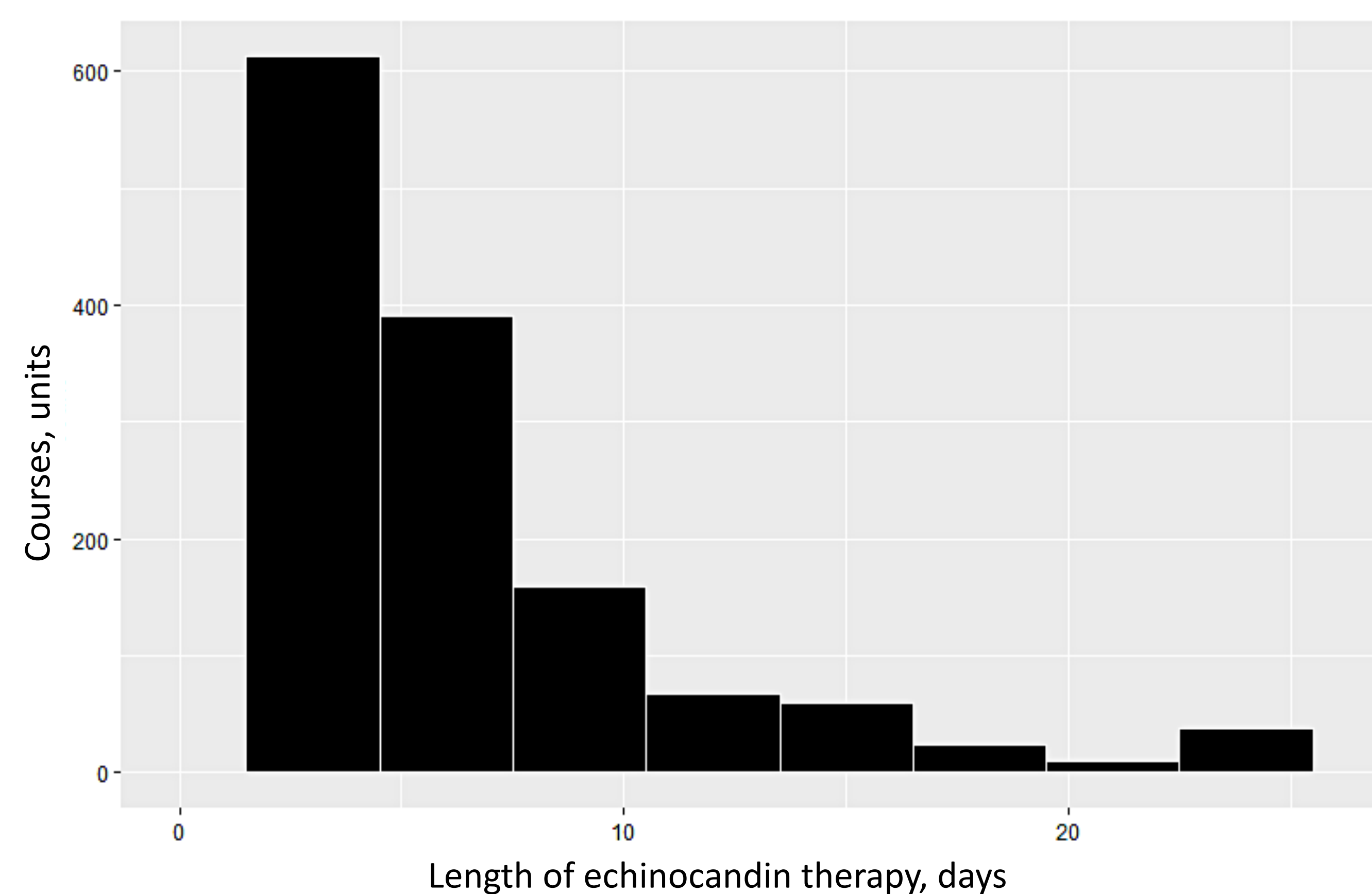


Figure 2. Length of therapy during the hospital stay



CONCLUSION

- Overall, the rate of echinocandin use did not change appreciably
- Initiation of echinocandin therapy occurred evenly throughout the entire hospitalization time-period
- A significant portion (26.6%) of echinocandin courses were continued after hospital discharge
- Further studies evaluating potential benefits of long-acting echinocandin therapy with an emphasis of transition of care and antifungal stewardship are warranted

Figure 3. Echinocandin discharge disposition (n=350)

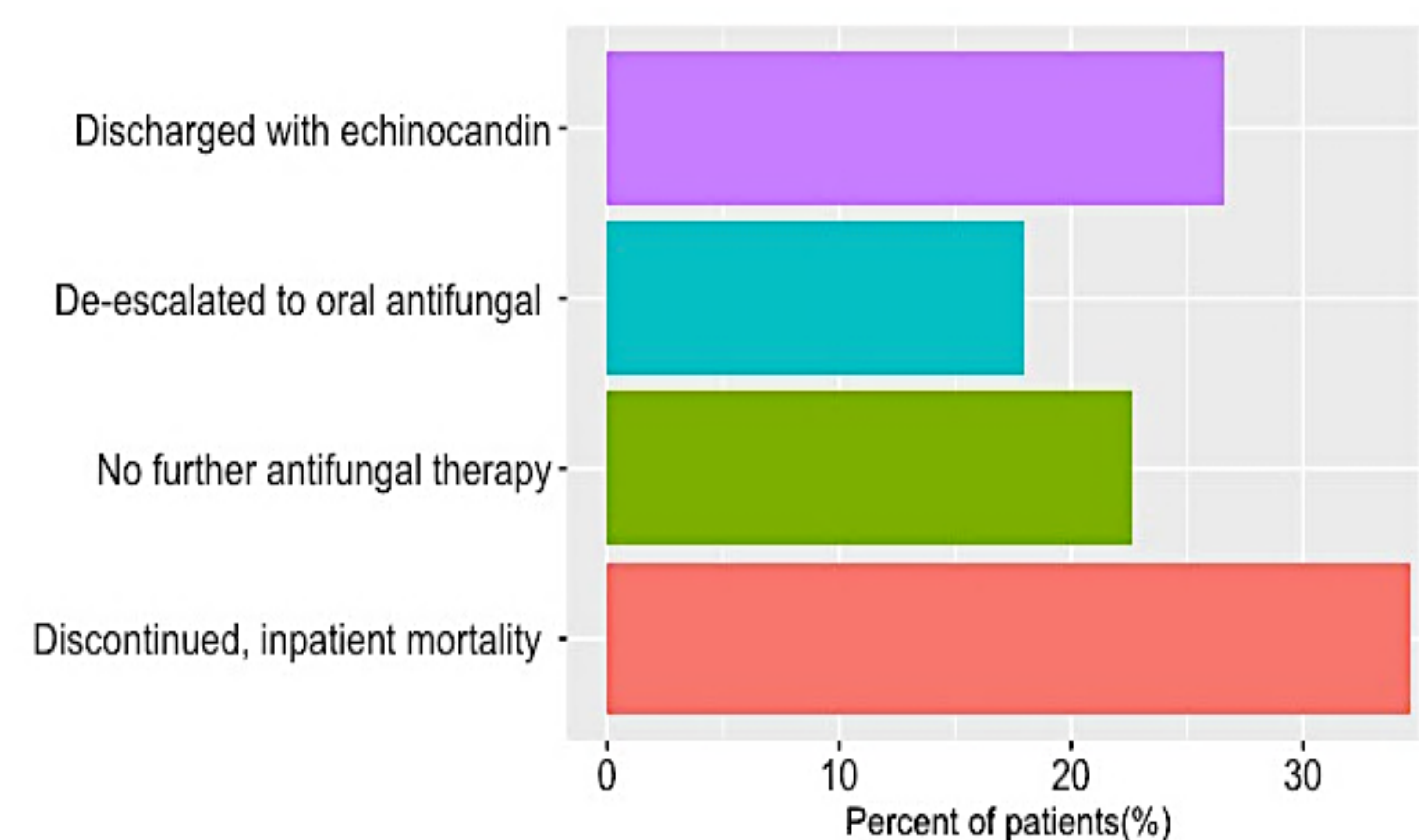
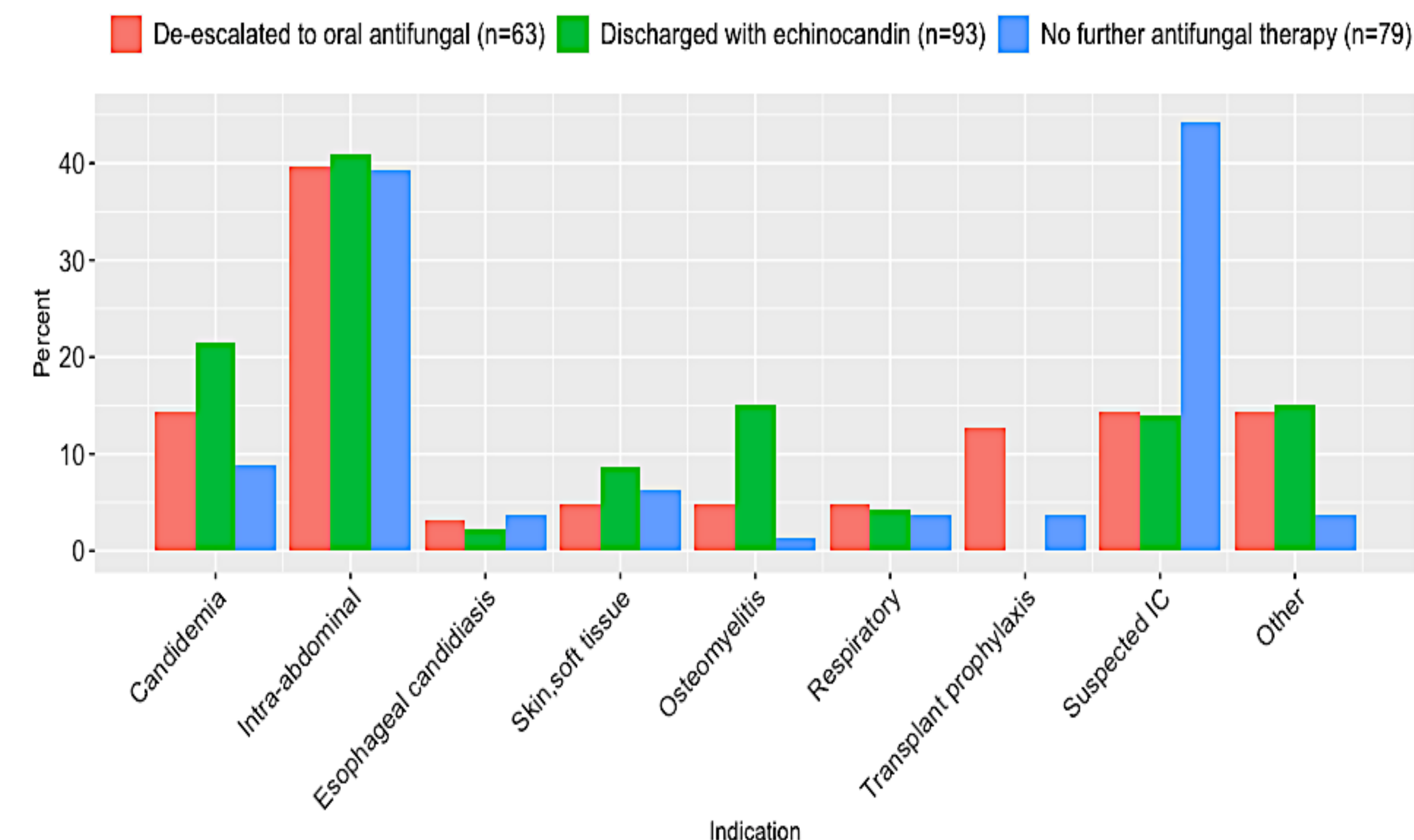


Figure 4. Echinocandin discharge disposition based on indication



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REFERENCES

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