INTRODUCTION:
• Few studies exist to guide management of possible osteomyelitis (osteoinfection) underlying stage 4 pressure ulcers.
• We hypothesized that infectious disease (ID) physicians would vary widely in their approach to such patients.

METHODS
The Emerging Infections Network distributed a 10-question electronic survey in 2018 to 1,332 adult ID physicians in different practice settings to determine their approach to such patients.

RESULTS
• 558 respondents (response rate: 42%)
• 83% (464) had managed at least one such patient in the past year.
• 60% usually felt confident in diagnosing osteomyelitis in this setting.
• Strongest reported indicator of osteomyelitis was palpable / visible bone (Figure 1).
• Favored approaches in patients with visible / palpable bone varied:
  - 41% would assume osteomyelitis.
  - 27% would attempt pressure off-loading first.
  - 22% would perform diagnostic testing immediately.
• Preferred tests: bone biopsy (culture / histopathology) and MRI
• Diverse favored routes and durations of antimicrobial therapy (Figures 2 and 3),
• Most would treat longer if no full surgical debridement (P < .001).
• Per 62%, such osteomyelitis is usually / almost always treated excessively.
• 59% suggested multiple topics for future research.

SUMMARY OF LITERATURE TO DATE:
• Few studies; nearly all are small / retrospective.
• Histologic osteomyelitis found in 17-46% of biopsies from exposed bone.
• Neither presence nor duration of local inflammation correlated with histologic osteomyelitis.
• MRI: non-specific (pressure-induced changes resemble infection)
• Recent large RCT (OVIVA) found PO and IV therapy comparable.
• No evidence to support either:
  - a role for antimicrobials if no debridement and wound coverage – except for short-term therapy (< 2 weeks) for acute soft-tissue infection around the ulcer
  - > 6 weeks of antimicrobials after debridement and wound closure

Most of the reported practice is not supported by the available evidence, which is limited and of low quality.