## Summary

18-19 Nov 2019

FDA-IDSA-NIH-Pew Workshop

Enhancing the Clinical Trial Enterprise in the US

### Big Messages

- The AMR enterprise is in crisis
- Can't fix it all here / today, but many key elements are within the scope of this group
- Emerging ideas
- Next steps

### The AMR enterprise is in crisis

- Intriguing positive signs in early pipeline
- But, it's fragile: "Check Engine" light is flashing
- Late-stage commercial failures have occurred and seem likely to continue
- Even when successful, an antibiotic returns far less than any oncology product



# Elements within our grasp If we focus, we can move the needle

- What have we learned?
  - Push funding works: CARB-X, BARDA, NIAID, Wellcome Trust, Novo REPAIR have lit a bonfire – and intriguing new products are coming!
  - We can reliably get products to approval with basic studies
  - Those studies generalize reasonably well to the US
  - We can't generate the same quality of data for all uses: Other
    possible use(s) of a new drug are important to clinicians but are not
    (and will not be) discussed in the approved label
- What do we want?
  - (ID) physicians: Access to all the data, preferably interpreted
  - Payors, P&T committees: Ways to judge data quality
  - Patients: Hear their voice! Address how patients feel
  - Companies: Validated, acceptable mechanisms for promoting based on data on resistant pathogens and difficult infections
  - FDA: Labeling per regulations ("Adequate and well-controlled")

### Emerging ideas (1 of 2)

Tell the story

- Making clear the limits on data generation
  - We need to explain the limits to our peers
  - This will require some work it's easy to wish for more, especially when the constraints on data generation are not obvious
  - If there was a better way to do this, we'd do it
- Making clear the limits on labeling
  - Without rules, we would have arbitrary unpredictable decisions
  - "Adequate and well-controlled" is the standard
- Sharing the available data: Limits on the label
  - Publish in a major journal! Talk about the nuances of the trial!
  - IDSA can validate by publishing informed critiques of the available secondary data: "What one peer would tell another."
  - Such reviews would / should be appropriate for discussions with payors, discussions with insurers, and (maybe) promotional use
  - How can we include Europe in this conversation?

### Emerging ideas (2 of 2)

- Use the data
- Be clear on the power of the standard indication
  - Modern non-inferiority studies are powerful tools
  - They do detect inferior agents
  - They provide clear safety and efficacy comparisons
  - They facilitate initial approval
  - They provide a basis for additional indications
- Better use of the other data we have / can readily get
  - We need to learn to borrow data across indications
  - Different thresholds may make sense for different settings
  - And, don't forget PROs and other patient-oriented measures!
- Generate data more efficiently
  - Not a panacea, but platform trials show real potential to reduce cost and speed data generation
  - This seems particularly true after initial approval is achieved: studies in pediatrics and rare infections would seem good a fit

#### Next steps

- This has been an excellent conversation!
- Many thanks to all who participated
  - Shout out to Sunita Shukla for herding the cats!
- Nothing is set, but a subsequent debate seems needed on ways to better use the data we have
  - Borrowing data across indications
  - Different thresholds for different settings
  - Including Europe in this conversation
- Stay tuned...