

This was not a scientific poll and the results are not statistically significant. The responses reflect opinions of individual workshop participants and are not a consensus publication of the National Academies of Sciences, Engineering, and Medicine.

Innovations in Pharmaceutical Manufacturing on the Horizon: A Virtual Dissemination Workshop

28 - 29 Oct 2021

Poll results



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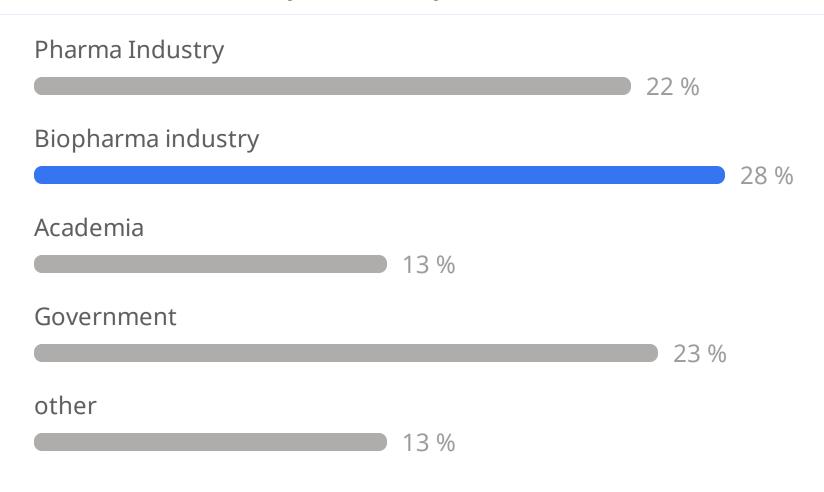
- Welcome
- 4. Which of these innovations do you believe will have the greatest opportunity to advance pharmaceutical manufacturing?
- Session 2
- Session 3



Welcome (1/3)



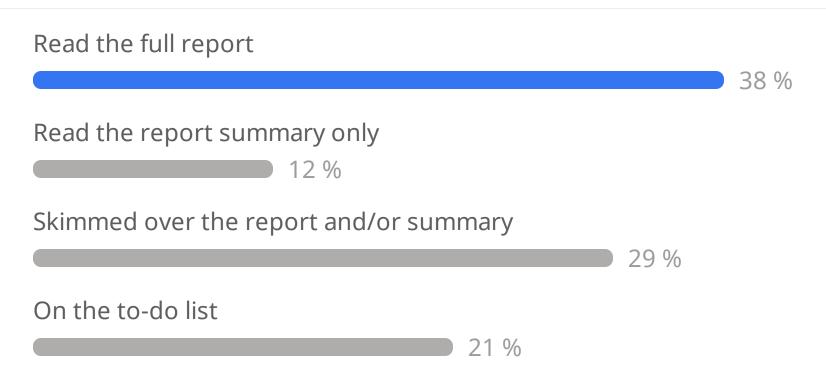
1. Which sector do you identify with?



Welcome (2/3)



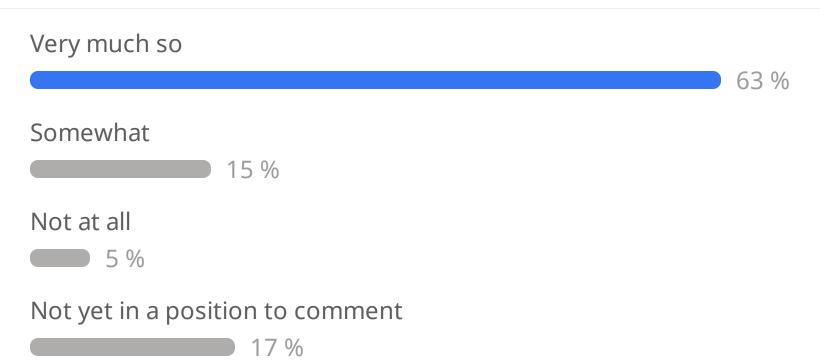
2. What level of engagement did you have with the report?



Welcome (3/3)



3. Did you find the report relevant to your field?



4. Which of these innovations do you believe will have the greatest opportunity to advance pharmaceutical manufacturing? (1/2)

New routes to drug substances 2 % Co-processed active pharmaceutical ingredients 5 % Continuous manufacturing 17 % Process intensification 29 % Additive Manufacturing 0 %

4. Which of these innovations do you believe will have the greatest opportunity to advance pharmaceutical manufacturing? (2/2)



Advanced process control and automation

19 %

Modeling and digital designs

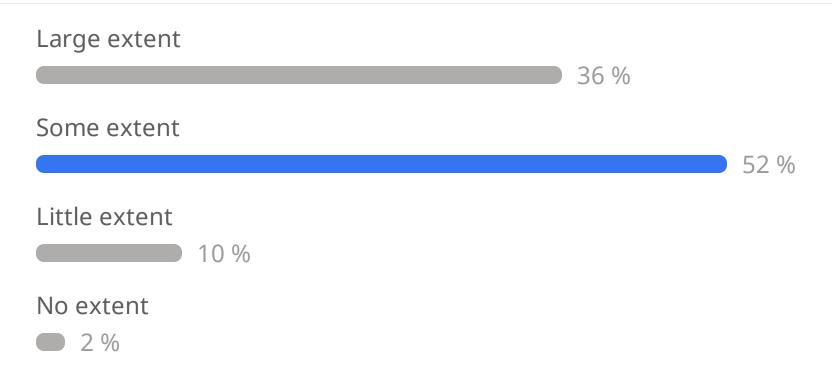
24 %

Modular system

Session 2 (1/5)



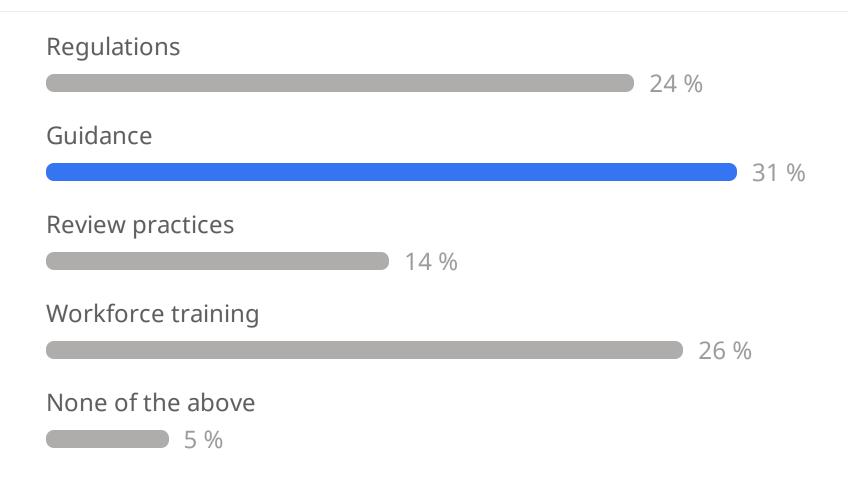
5. To what extent do you believe that innovation in pharmaceutical manufacturing can be accelerated by changes in regulatory policy, procedures, practices or cultures?



Session 2 (2/5)



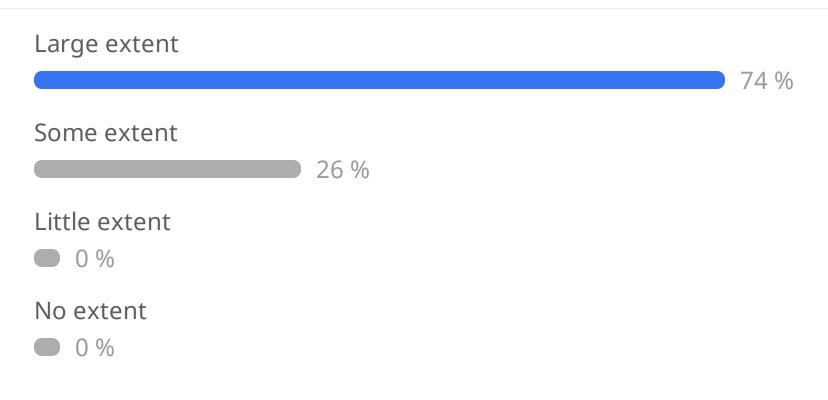
6. Which type of regulatory changes do you believe can best enable innovation:



Session 2 (3/5)



7. To what extent do you believe that pharmaceutical innovation can be enabled by INDUSTRY practices?



Session 2 (4/5)



8. Which industry practices would be most impactful to enable innovation?

Greater willingness to accept risk

24 %

Greater transparency regarding manufacturing innovation activities

19 %

Increased pre-competitive collaboration to substantially de-risk implementation

26 %

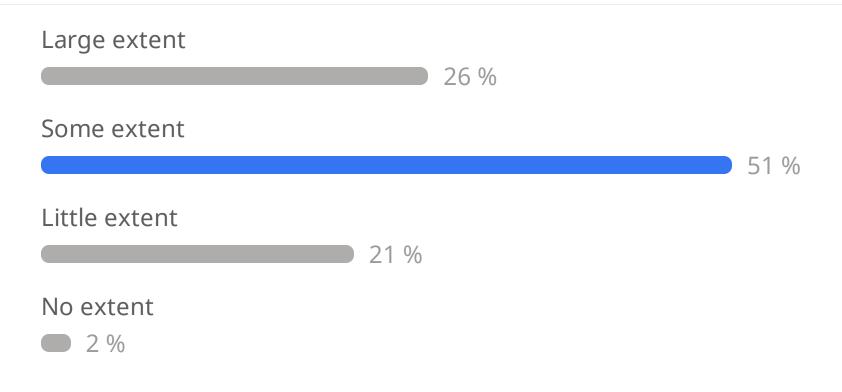
increased recognition of manufacturing as a value-driver



Session 2 (5/5)



9. To what extend do you believe that pharmaceutical innovation can be enabled by ACADEMIC practices?





Session 3 (1/2)



10. Which of these key considerations matters most to you in relation to implementing innovations? (1/2)

Risk of disrupting timeliness

50 %

Risk in extensive and expensive efforts to gain regulatory approval

37 %

Risk for substantial post-approval commitments

3 %

Uncertainties regarding business care

3 %

Access to trained personnel

Session 3 (1/2)



10. Which of these key considerations matters most to you in relation to implementing innovations?

Other

(2/2)

Session 3 (2/2)



11. In your opinion, which of the regulatory risks is more influential than the rest in business decisions related to innovations in manufacturing processes?

Protracted regulatory reviews

20 %

Clarity and consistency in the evaluation of residual risk to product quality

33 %

Satisfying regulators across different geographic areas