

# HEALTH & MEDTECH INNOVATION TALENT

Importance of an Innovation Training Framework  
Supplementary Dataset



Co-authored by:

**SINGAPORE BIODESIGN**



Centre for  
Lifelong Learning

Jointly endorsed by:

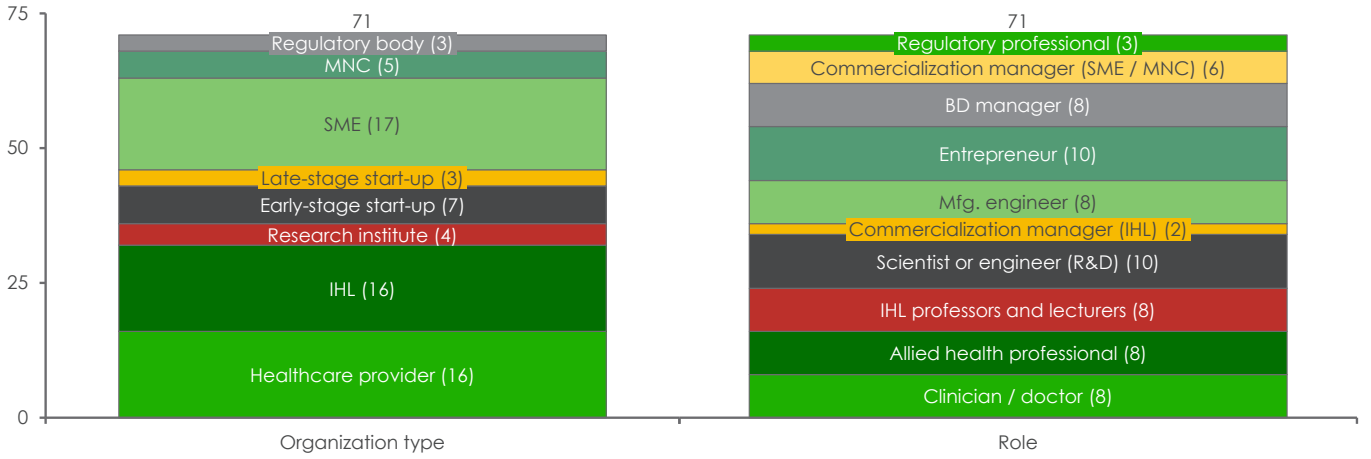
**NATIONAL RESEARCH FOUNDATION**  
PRIME MINISTER'S OFFICE  
SINGAPORE



**Enterprise  
Singapore**

**FIG.S1. SINGAPORE RESPONDENT PROFILE (N=71)**

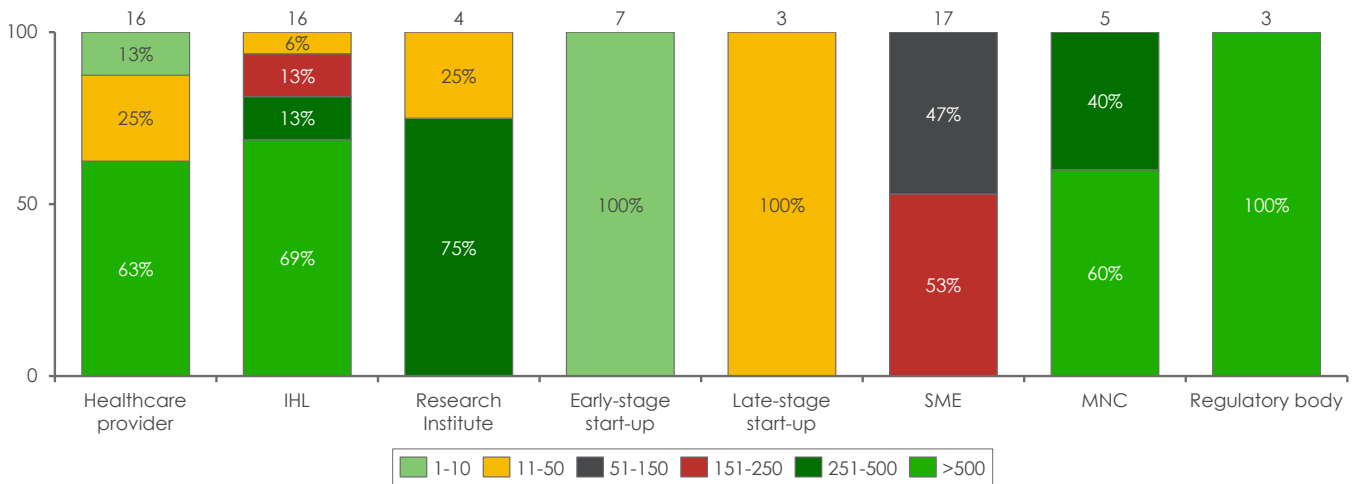
No. of respondents



Q: Which type of organization are you currently working with?  
 Q: Which of the following best describes your role in your current organization?  
 Note: IHL: Institute of Higher Learning; MNC: Multinational Company; SME: Small-to-medium Enterprise  
 Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S2. RESPONDENT'S COMPANY SIZE (N=71)**

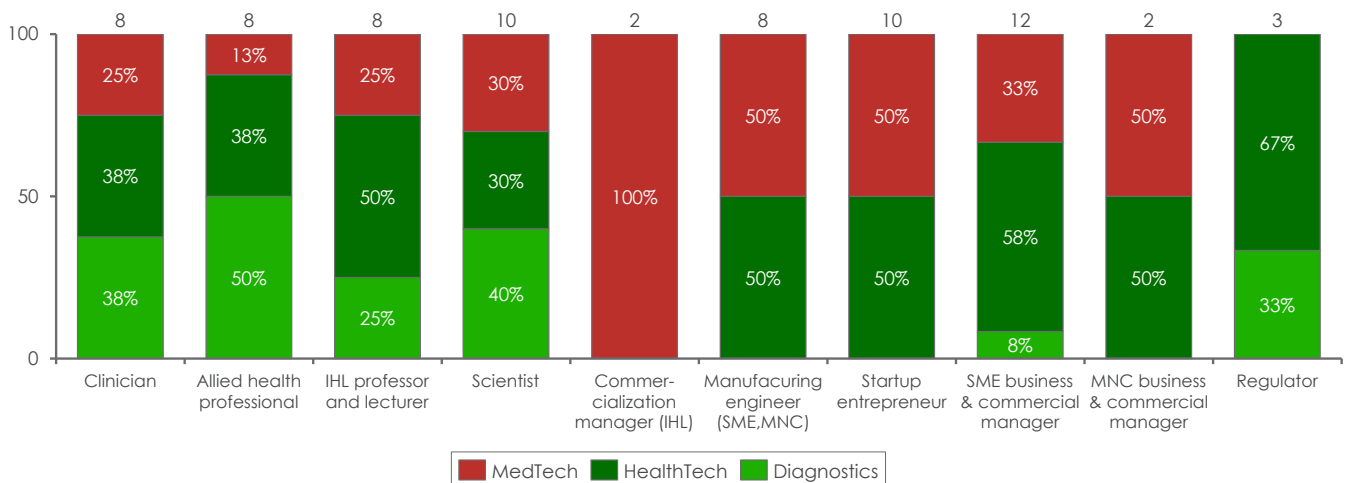
% of respondents within organization type



Q: How many employees are there in your current organization?  
 Note: IHL: Institute of Higher Learning; SME: Small-to-medium Enterprise; MNC: Multinational Company  
 Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S3. RESPONDENT'S AREA OF SPECIALTY OR INTEREST IN INNOVATION (N=71)**

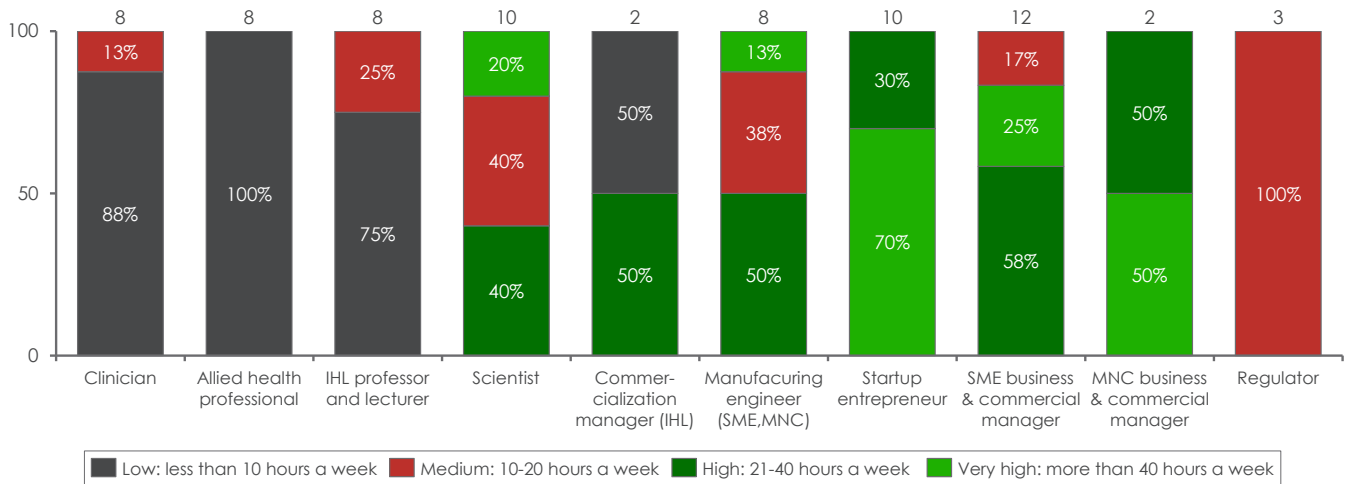
% of respondents within stakeholder group



Q: Which of the following best describes your area of specialty or interest in innovation?  
 Note: IHL: Institute of Higher Learning; Business development; SME: Small-to-medium Enterprise; MNC: Multinational Company  
 Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S4. RESPONDENT'S LEVEL OF INNOVATION INVOLVEMENT (N=71)**

% of respondents within stakeholder group



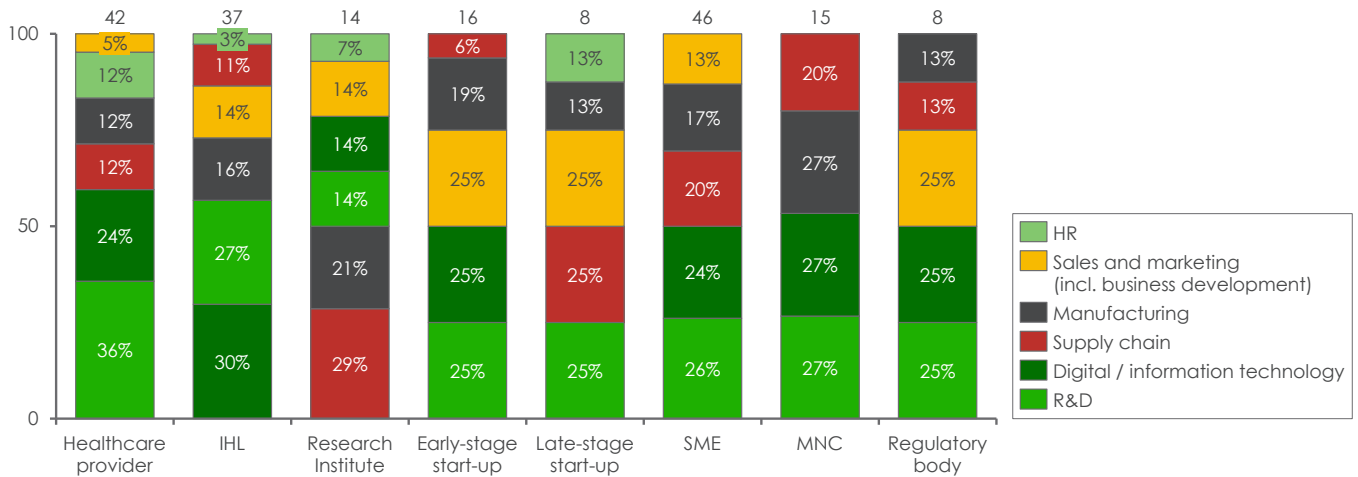
Q: What is your level of involvement in Health and MedTech innovation based on average time spent?

Note: IHL: Institute of Higher Learning; SME: Small-to-medium Enterprise; MNC: Multinational Company

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S5. TALENT SHORTAGE WITHIN SINGAPORE'S HEALTH AND MEDTECH ECOSYSTEM (N=71)**

% of mentions within organization type



Q: Within Singapore's Health and MedhTech ecosystem, which roles are difficult to hire or recruit talents for? [multiple select]

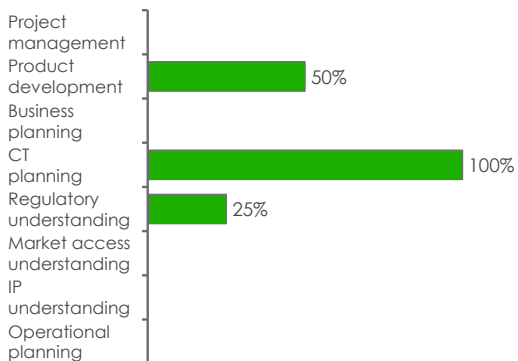
Note: IHL: Institute of higher learning; SME: Small-to-medium Enterprise; MNC: Multinational Company; HR: Human Resources; R&D: Research & development

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S6. SKILLS AND COMPETENCIES REQUIRED FOR CLINICIANS (N=8)**

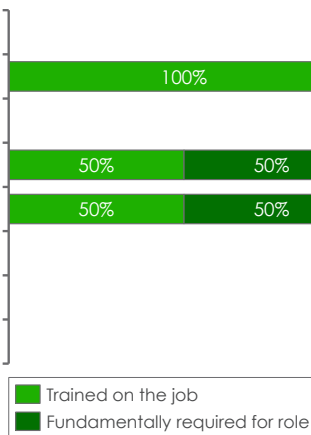
**Essential competencies for role**

% of respondents



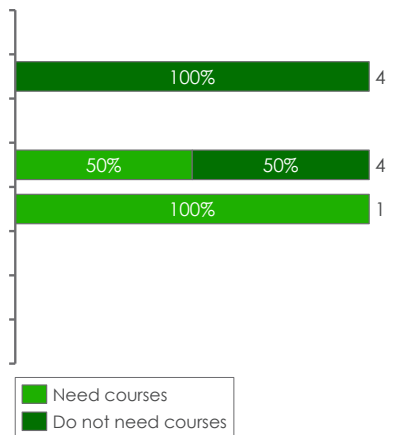
**Required competencies vs. trained on the job**

% of respondents within competency



**Competencies trained on the job needing training courses**

% of respondents within competency

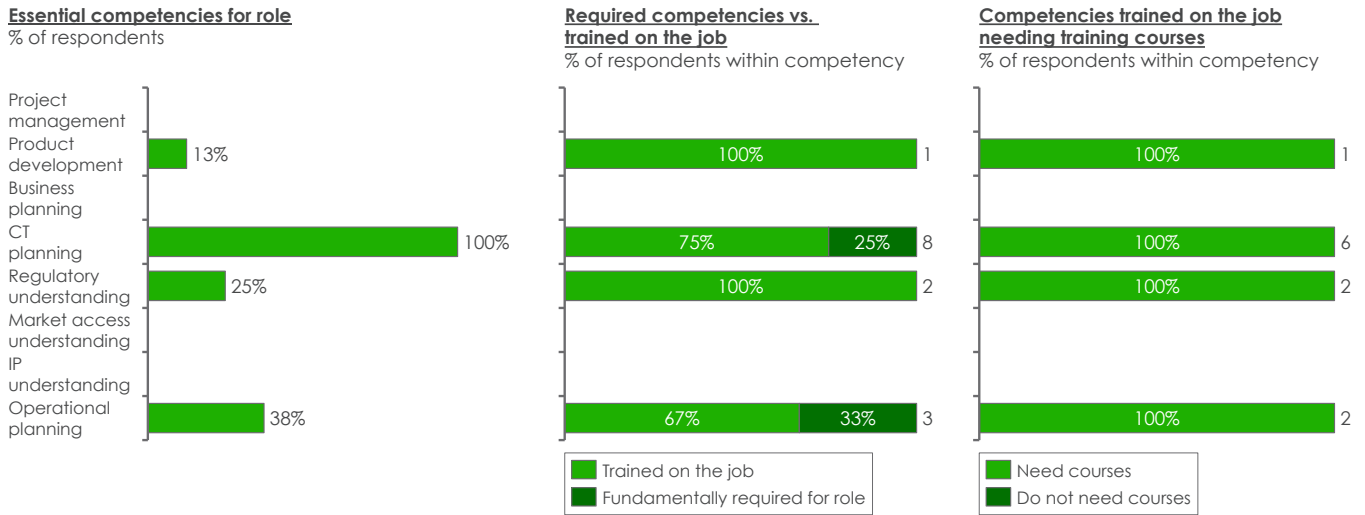


Q: Which competencies are required for your role? Which are fundamentally required vs. can be learnt on-the-job or through training courses?

Note: Empty bars indicate respondents did not select the competency as essential; CT: Clinical Trial; IP: Intellectual Property; IHL: Institute of higher learning

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S7. SKILLS AND COMPETENCIES REQUIRED FOR ALLIED HEALTH PROFESSIONALS (N=8)**

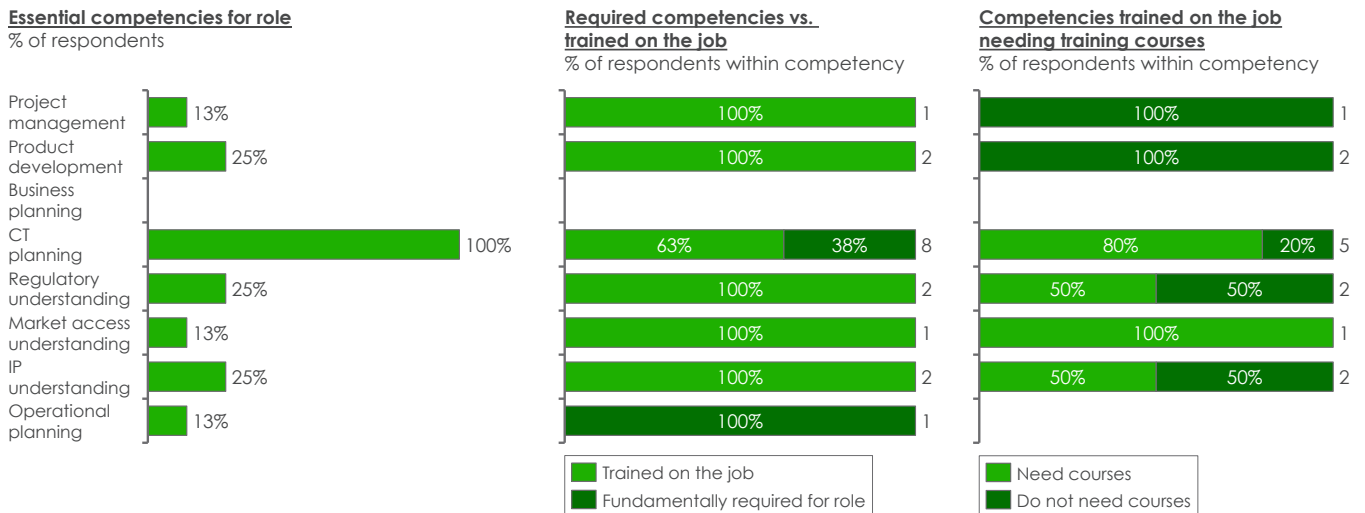


Q: Which competencies are required for your role? Which are fundamentally required vs. can be learnt on-the-job or through training courses?

Note: Empty bars indicate respondents did not select the competency as essential; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S8. SKILLS AND COMPETENCIES REQUIRED FOR INSTITUTES OF HIGHER LEARNING PROFESSORS AND LECTURERS (N=8)**

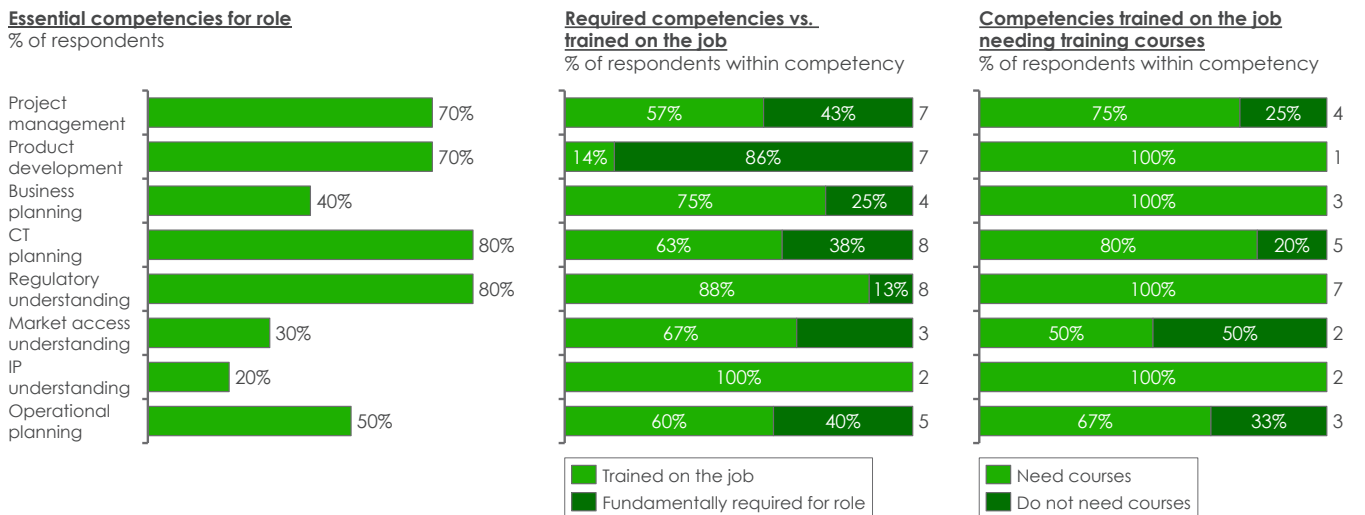


Q: Which competencies are required for your role? Which are fundamentally required vs. can be learnt on-the-job or through training courses?

Note: Empty bars indicate respondents did not select the competency as essential; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S9. SKILLS AND COMPETENCIES REQUIRED FOR RESEARCH SCIENTISTS AND ENGINEERS (N=10)**

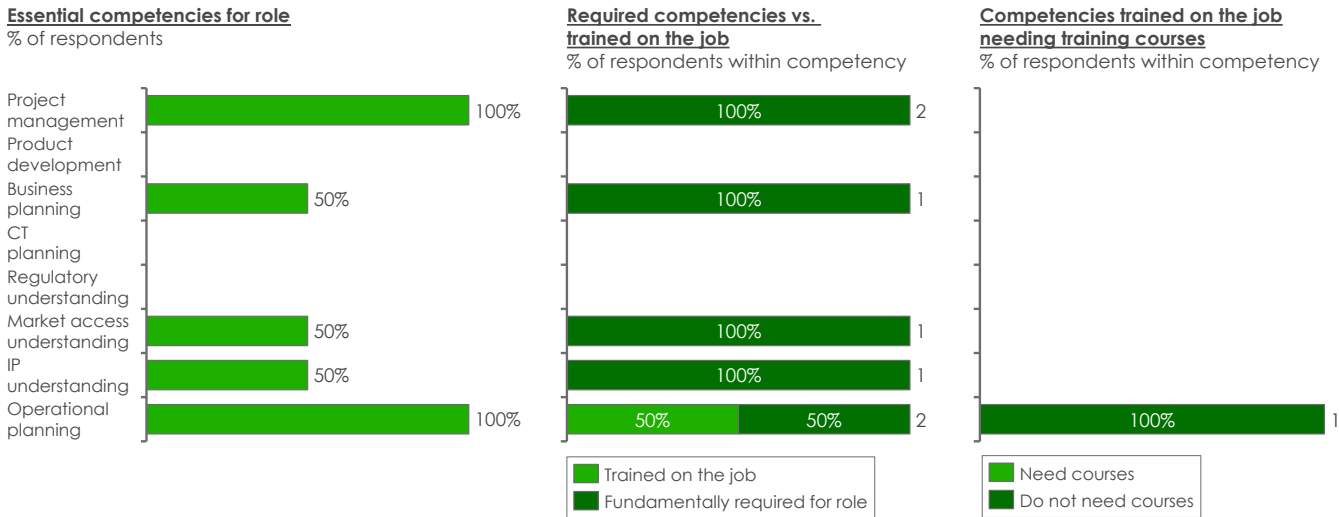


Q: Which competencies are required for your role? Which are fundamentally required vs. can be learnt on-the-job or through training courses?

Note: CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S10. SKILLS AND COMPETENCIES REQUIRED FOR INSTITUTES OF HIGHER LEARNING INNOVATION AND COMMERCIALISATION MANAGERS (N=2)**

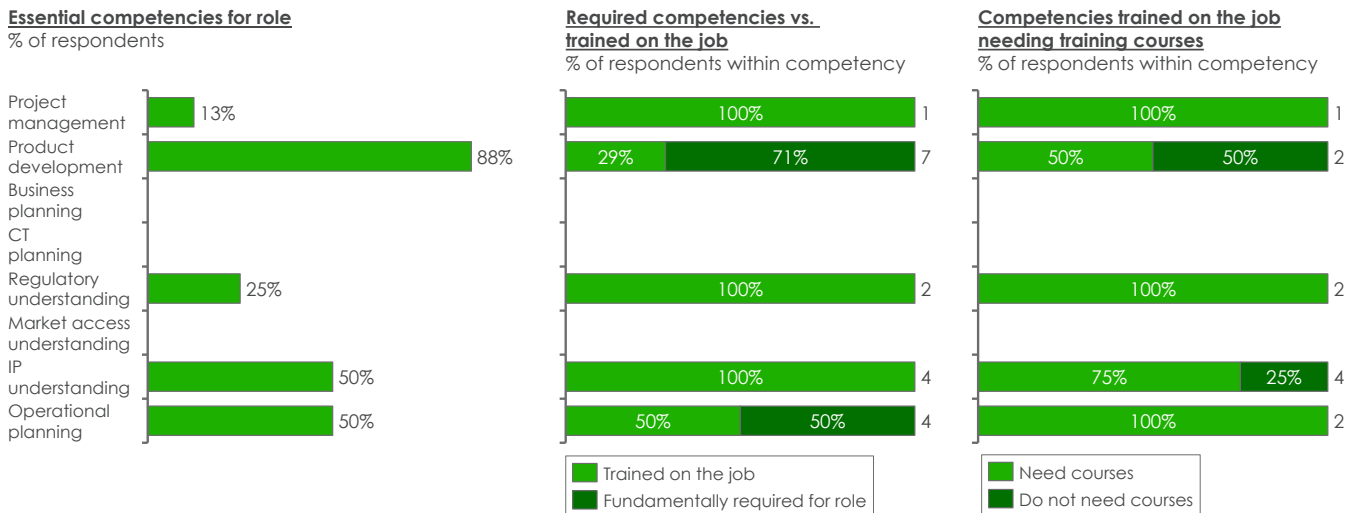


Q: Which competencies are required for your role? Which are fundamentally required vs. can be learnt on-the-job or through training courses?

Note: Empty bars indicate respondents did not select the competency as essential; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S11. SKILLS AND COMPETENCIES REQUIRED FOR MANUFACTURING ENGINEERS (N=8)**

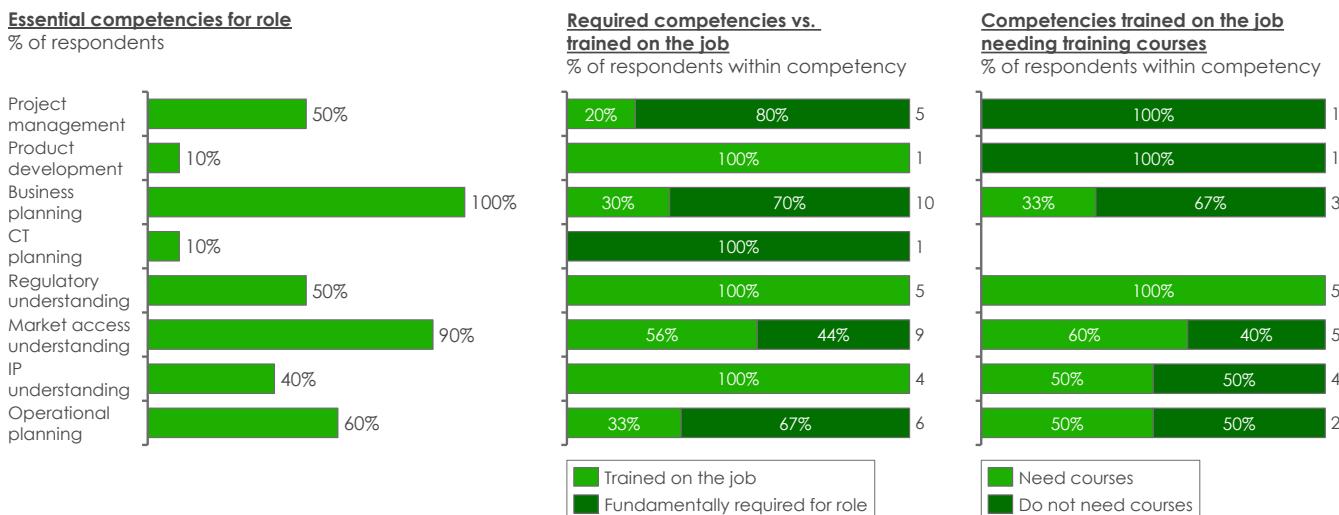


Q: Which competencies are required for your role? Which are fundamentally required vs. can be learnt on-the-job or through training courses?

Note: Empty bars indicate respondents did not select the competency as essential; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S12. SKILLS AND COMPETENCIES REQUIRED FOR START-UP ENTREPRENEURS (N=10)**

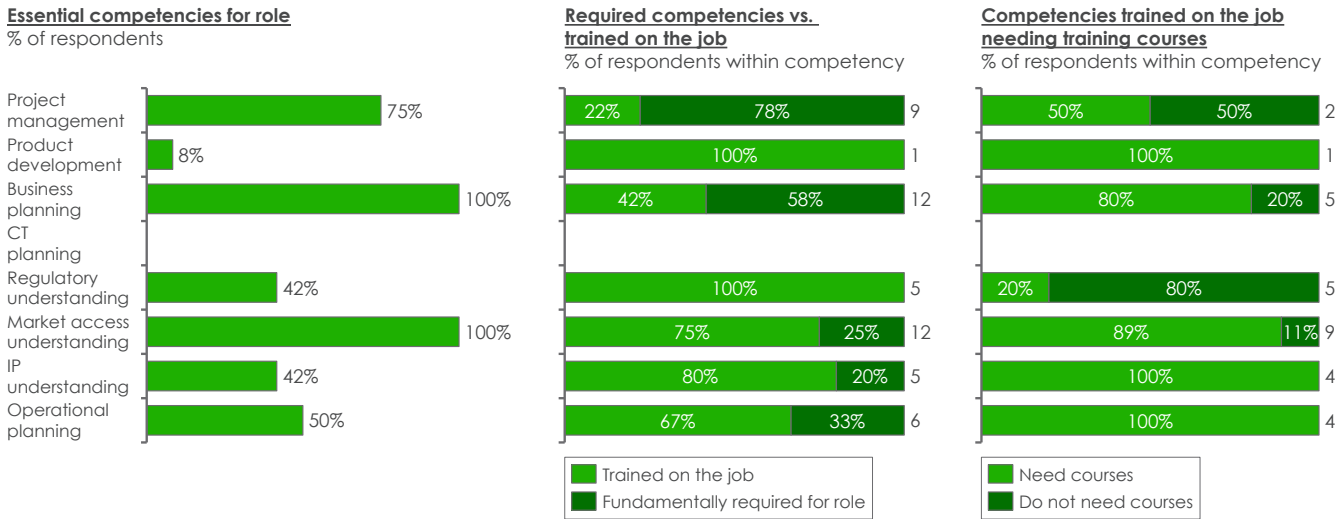


Q: Which competencies are required for your role? Which are fundamentally required vs. can be learnt on-the-job or through training courses?

Note: CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S13. SKILLS AND COMPETENCIES REQUIRED FOR BUSINESS DEVELOPMENT AND COMMERCIAL MANAGERS IN SMALL-TO-MEDIUM ENTERPRISES (N=12)**

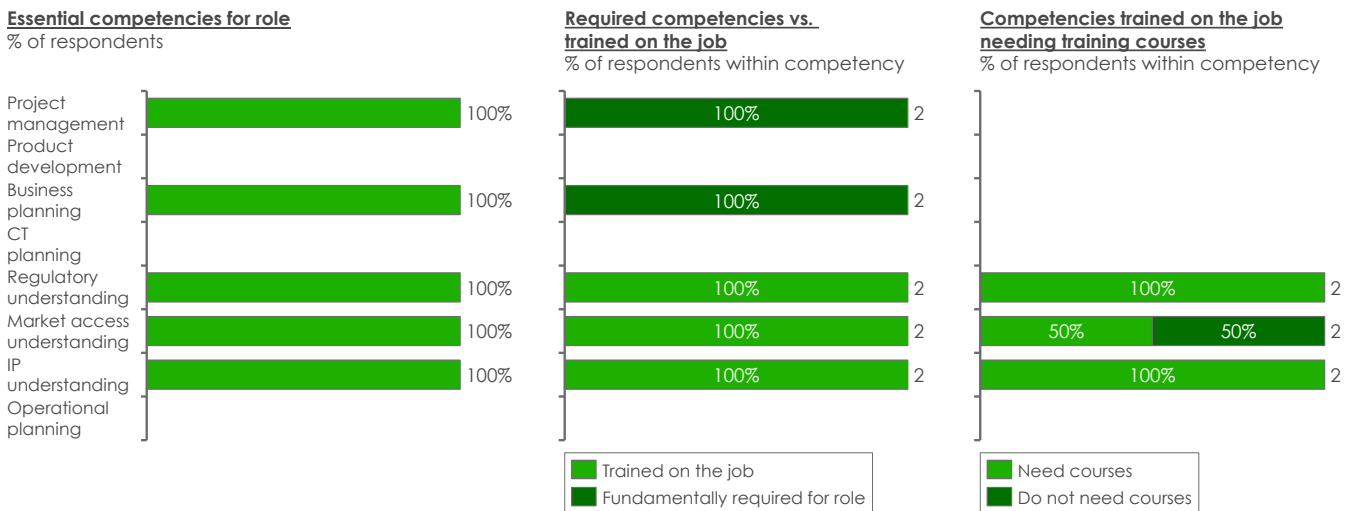


Q: Which competencies are required for your role? Which are fundamentally required vs. can be learnt on-the-job or through training courses?

Note: Empty bars indicate respondents did not select the competency as essential; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S14. SKILLS AND COMPETENCIES REQUIRED FOR BUSINESS DEVELOPMENT AND COMMERCIAL MANAGERS IN MULTINATIONAL COMPANIES (N=2)**

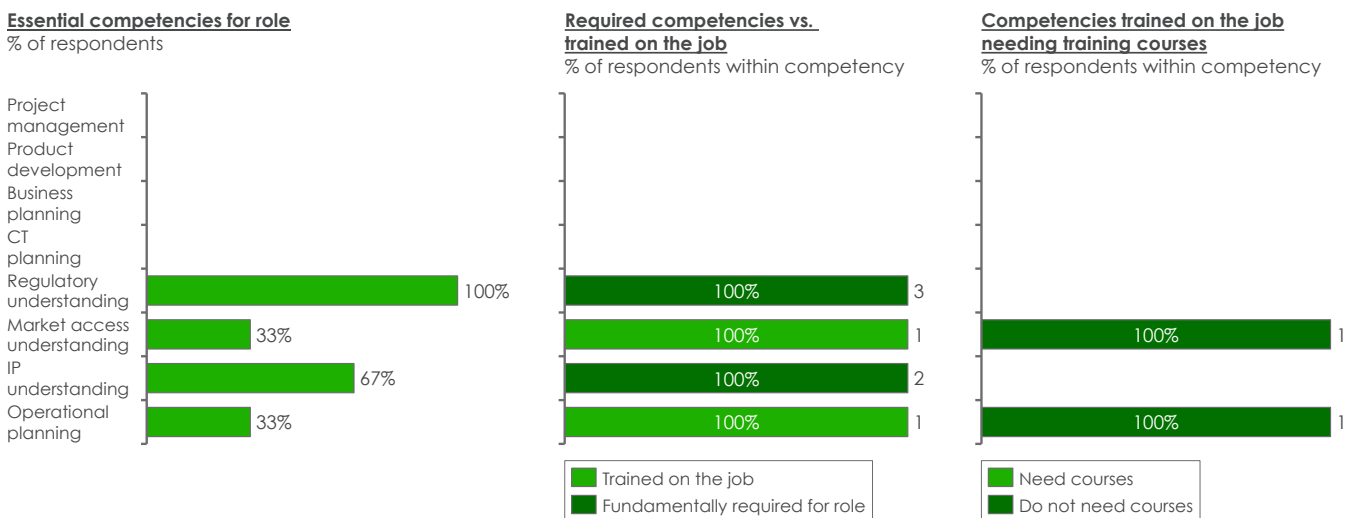


Q: Which competencies are required for your role? Which are fundamentally required vs. can be learnt on-the-job or through training courses?

Note: Empty bars indicate respondents did not select the competency as essential; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S15. SKILLS AND COMPETENCIES REQUIRED FOR REGULATORS (N=3)**

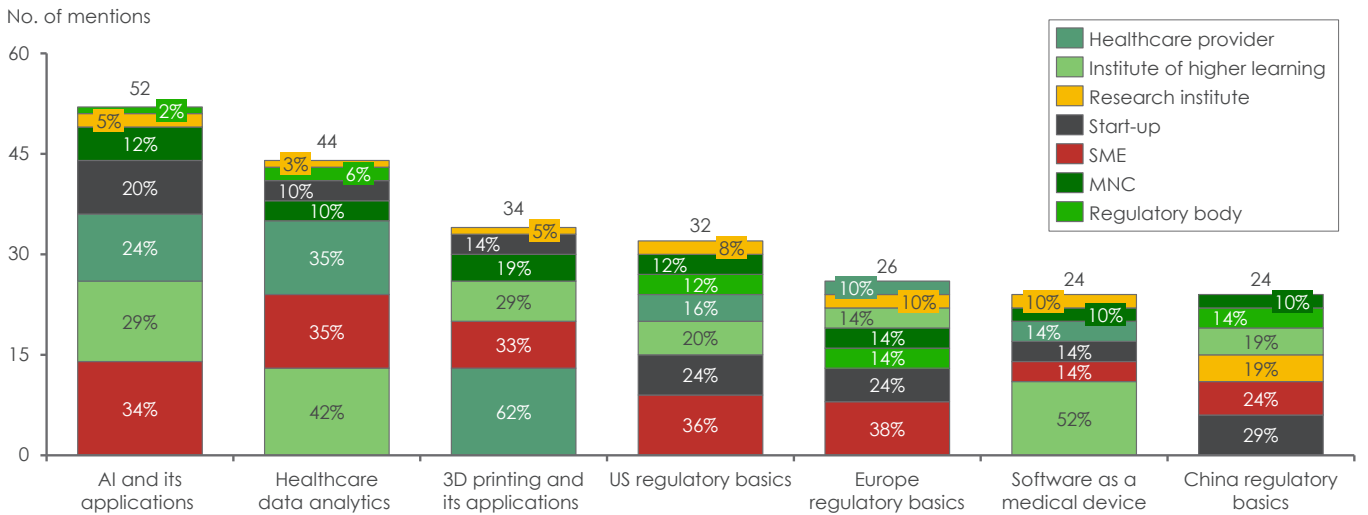


Q: Which competencies are required for your role? Which are fundamentally required vs. can be learnt on-the-job or through training courses?

Note: Empty bars indicate respondents did not select the competency as essential; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S16. OTHER KEY TRENDS OF INTEREST FOR TRAINING (N=71)**

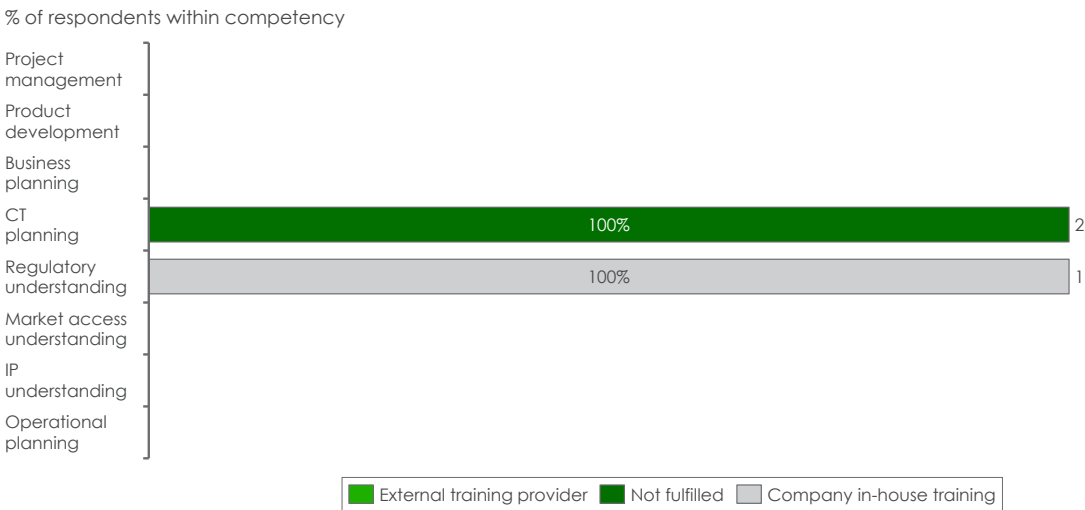


Q: What other key trends in Med/HealthTech you are interested in getting training for yourself (or your team)?

Note: MNC: Multinational Company; SME: Small-to-medium Enterprise

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S17. PRIMARY TRAINING CHANNEL FOR CLINICIANS (N=8)**

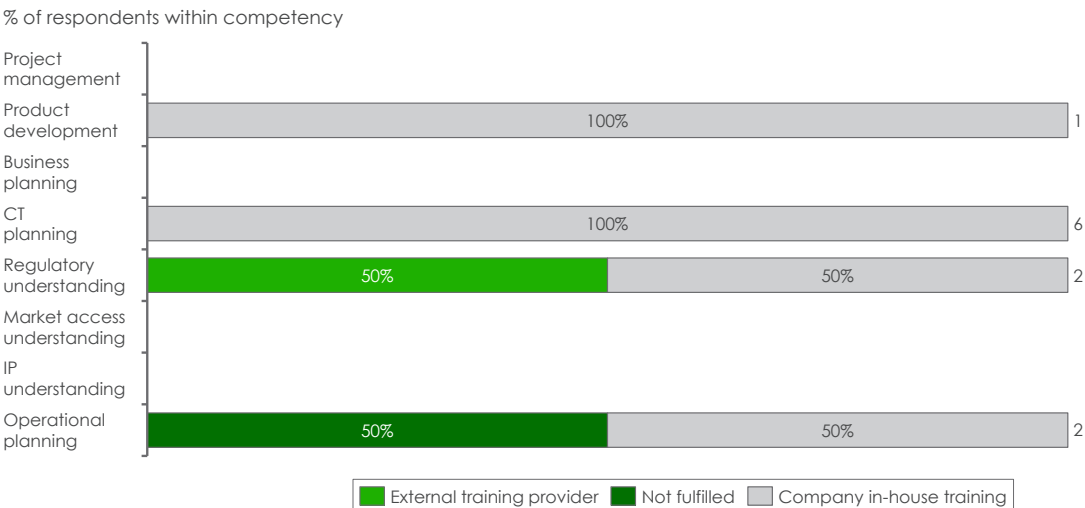


Q: How do you (or your team) primarily fulfill training needs? [single select choice that is used more often]

Note: Empty bars indicate that respondents did not select the competency as 'needing training'; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S18. PRIMARY TRAINING CHANNEL FOR ALLIED HEALTH PROFESSIONALS (N=8)**



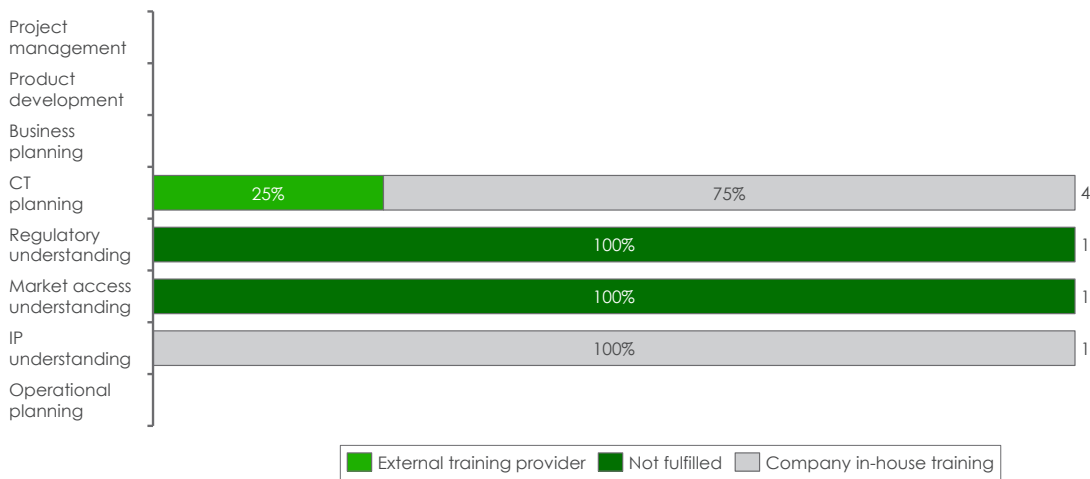
Q: How do you (or your team) primarily fulfill training needs? [single select choice that is used more often]

Note: Empty bars indicate that respondents did not select the competency as 'needing training'; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S19. PRIMARY TRAINING CHANNEL FOR INSTITUTES OF HIGHER LEARNING PROFESSORS AND LECTURERS (N=8)**

% of respondents within competency



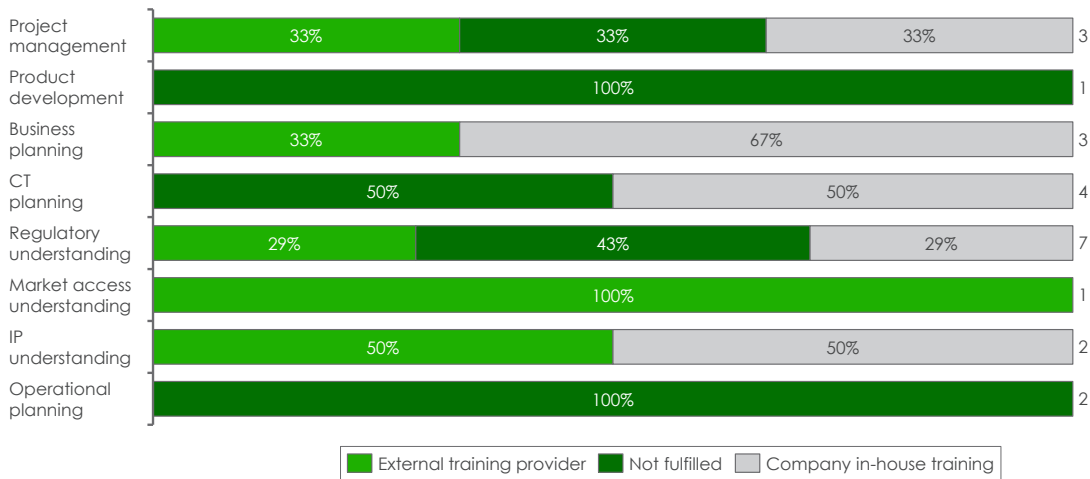
Q: How do you (or your team) primarily fulfill training needs? [single select choice that is used more often]

Note: Empty bars indicate that respondents did not select the competency as 'needing training'; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S20. PRIMARY TRAINING CHANNEL FOR RESEARCH SCIENTISTS AND ENGINEERS (N=10)**

% of respondents within competency



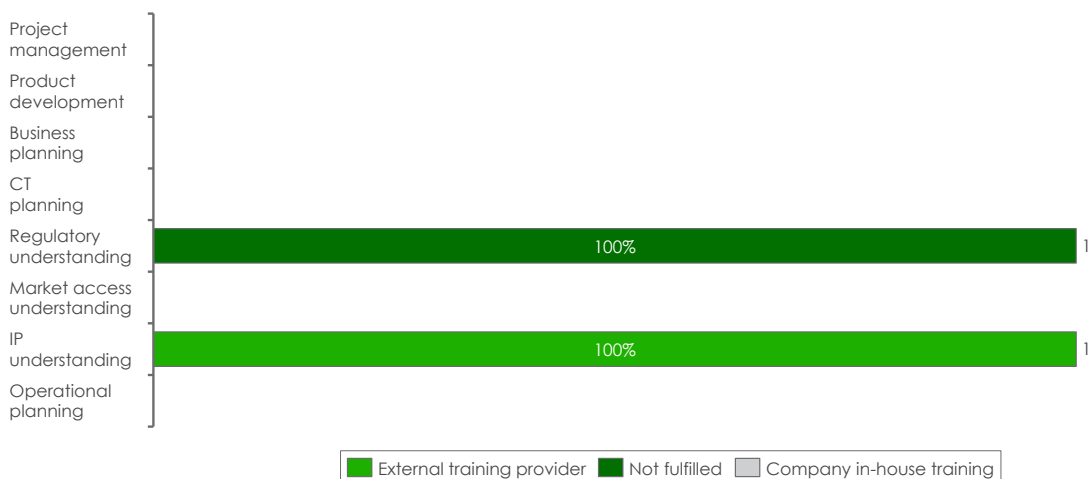
Q: How do you (or your team) primarily fulfill training needs? [single select choice that is used more often]

Note: CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S21. PRIMARY TRAINING CHANNEL FOR INSTITUTES OF HIGHER LEARNING INNOVATION AND COMMERCIALISATION MANAGERS (N=2)**

% of respondents within competency



Q: How do you (or your team) primarily fulfill training needs? [single select choice that is used more often]

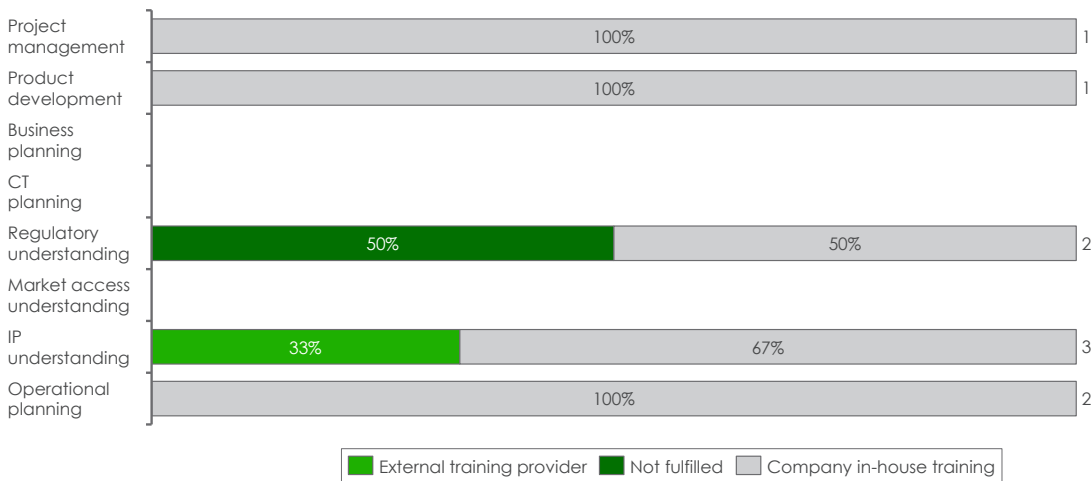
Note: Empty bars indicate that respondents did not select the competency as 'needing training'; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)



**FIG.S22. PRIMARY TRAINING CHANNEL FOR MANUFACTURING ENGINEERS (N=8)**

% of respondents within competency



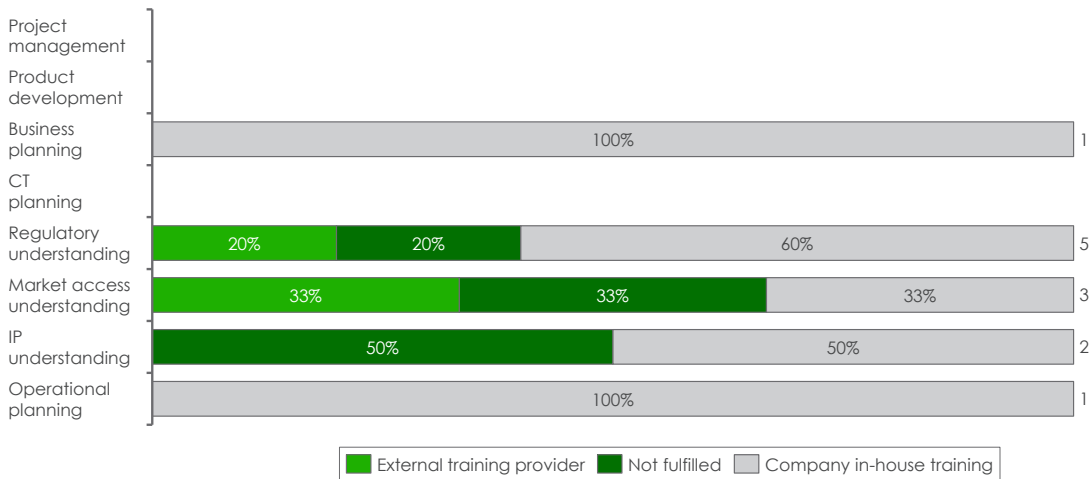
Q: How do you (or your team) primarily fulfill training needs? [single select choice that is used more often]

Note: Empty bars indicate that respondents did not select the competency as 'needing training'; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S23. PRIMARY TRAINING CHANNEL FOR START-UP ENTREPRENEURS (N=10)**

% of respondents within competency



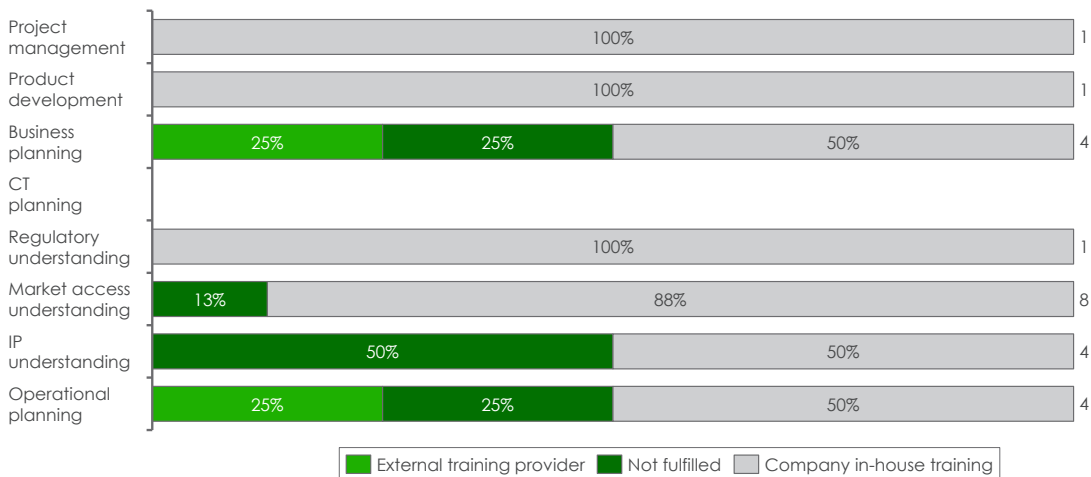
Q: How do you (or your team) primarily fulfill training needs? [single select choice that is used more often]

Note: Empty bars indicate that respondents did not select the competency as 'needing training'; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S24. PRIMARY TRAINING CHANNEL FOR BUSINESS DEVELOPMENT AND COMMERCIAL MANAGERS IN SMALL-TO-MEDIUM ENTERPRISES (N=12)**

% of respondents within competency



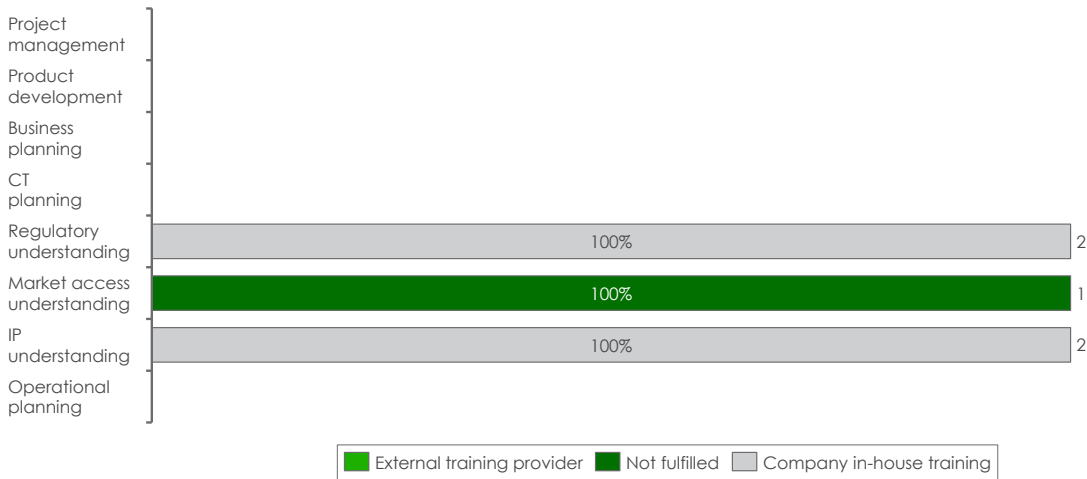
Q: How do you (or your team) primarily fulfill training needs? [single select choice that is used more often]

Note: Empty bars indicate that respondents did not select the competency as 'needing training'; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S25. PRIMARY TRAINING CHANNEL FOR BUSINESS DEVELOPMENT AND COMMERCIAL MANAGERS IN MULTINATIONAL COMPANIES (N=2)**

% of respondents within competency



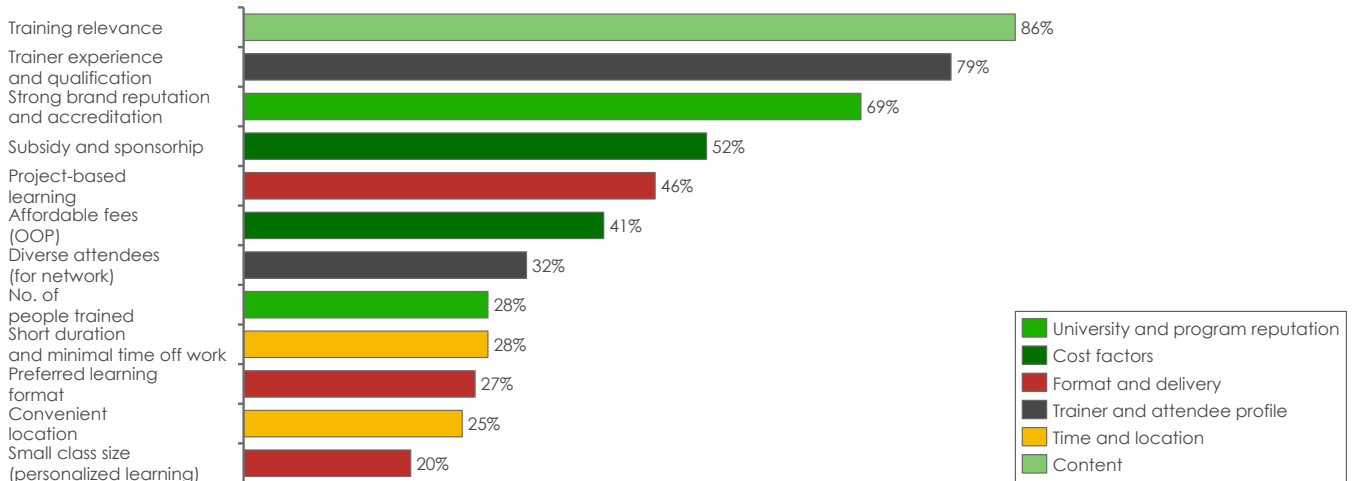
Q: How do you (or your team) primarily fulfil training needs? [single select choice that is used more often]

Note: Empty bars indicate that respondents did not select the competency as 'needing training'; CT: Clinical Trial; IP: Intellectual Property

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S26. CRITERIA FOR SELECTING HEALTH AND MEDTECH INNOVATION TRAINING COURSE (N=71)**

% of total respondents



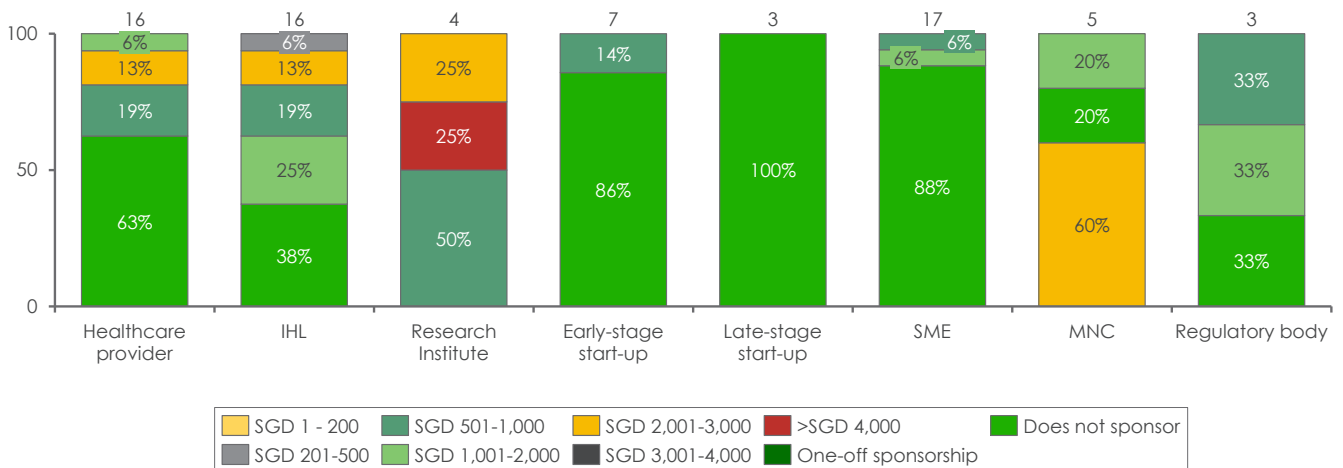
Q: What factors do you consider while selecting a Health and Medtech innovation training course from external training providers for you (or your team)?

Note: OOP: Out of Pocket

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S27. ORGANIZATION'S WILLINGNESS TO PAY FOR EXTERNAL HEALTH AND MEDTECH INNOVATION TRAINING PER EMPLOYEE PER YEAR (N=71)**

% of respondents within organization type



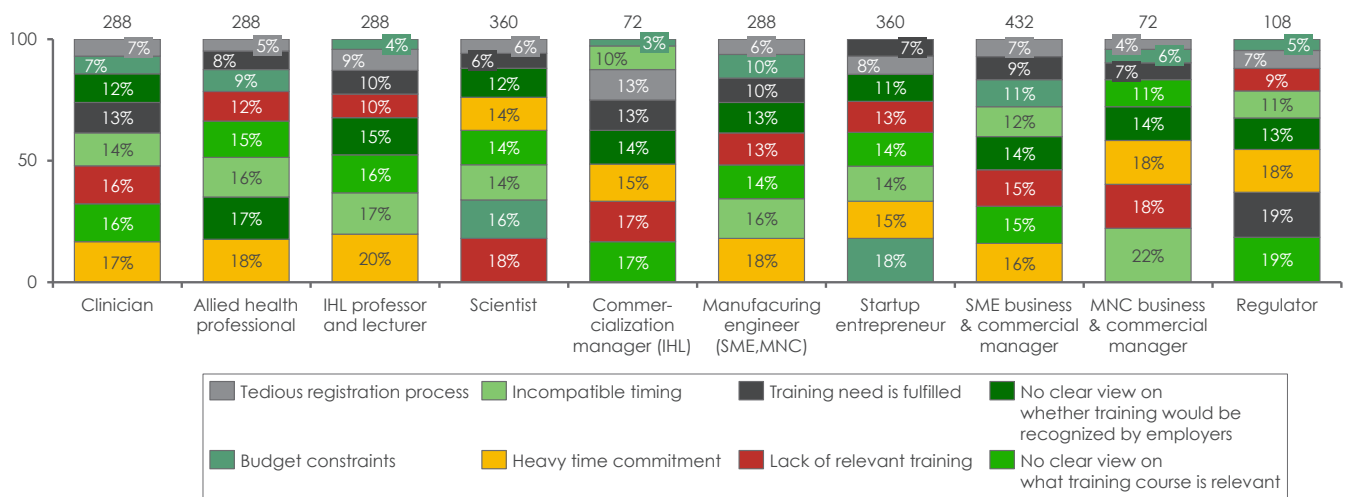
Q: How much does your organization typically sponsor an eligible employee per year for Health and MedTech innovation training offered by external provider?

Note: IHL: Institute of higher learning; SME: Small-to-medium Enterprise; MNC: Multinational Company

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S28. KEY BARRIERS TO TAKING HEALTH AND MEDTECH TRAINING COURSES (N=71)**

% of weighted mentions with stakeholder group



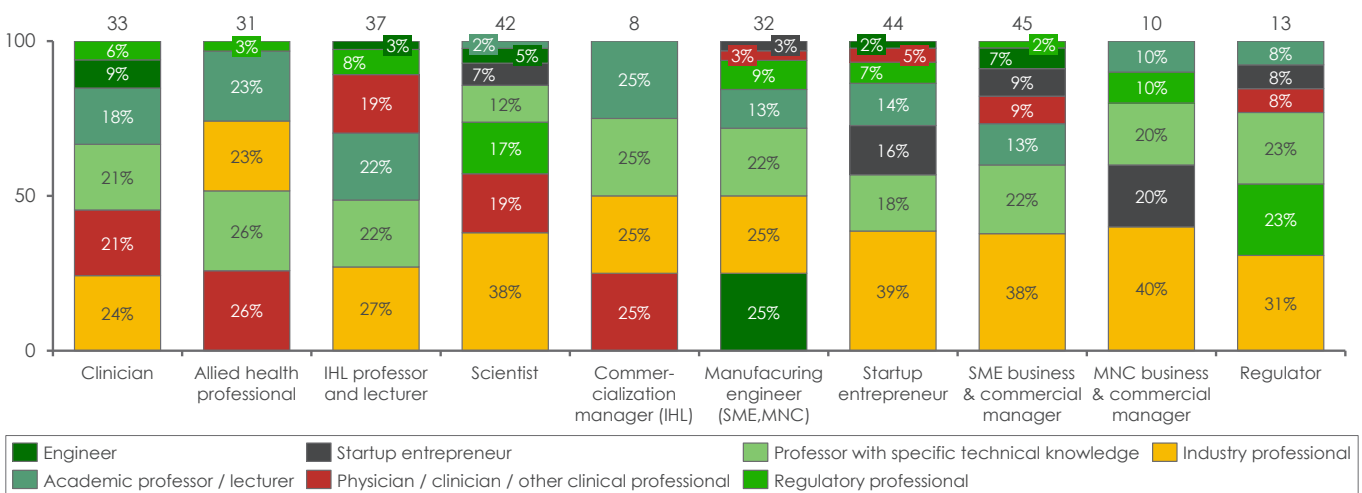
Q: Which of the following are your key barriers to taking Med/HealthTech training courses? [rank in order of relevance]

Note: IHL: Institute of higher learning; MNC: Multinational Company; SME: Small-to-medium Enterprise

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S29. PREFERRED TRAINER PROFILE BY EACH STAKEHOLDER GROUP (N=71)**

% of mentions within stakeholder group



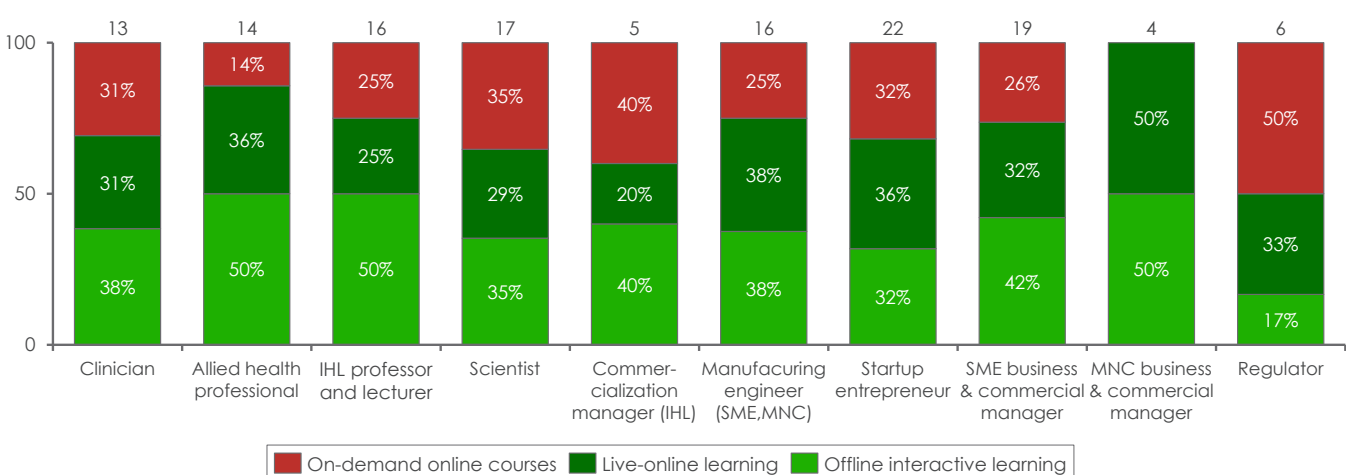
Q: What type of trainers would make a training course more attractive for you to attend? [multiple select]

Note: IHL: Institute of higher learning; MNC: Multinational Company; SME: Small-to-medium Enterprise

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S30. PREFERRED DELIVERY FORMAT OF TRAINING COURSE (N=71)**

% of mentions within stakeholder group



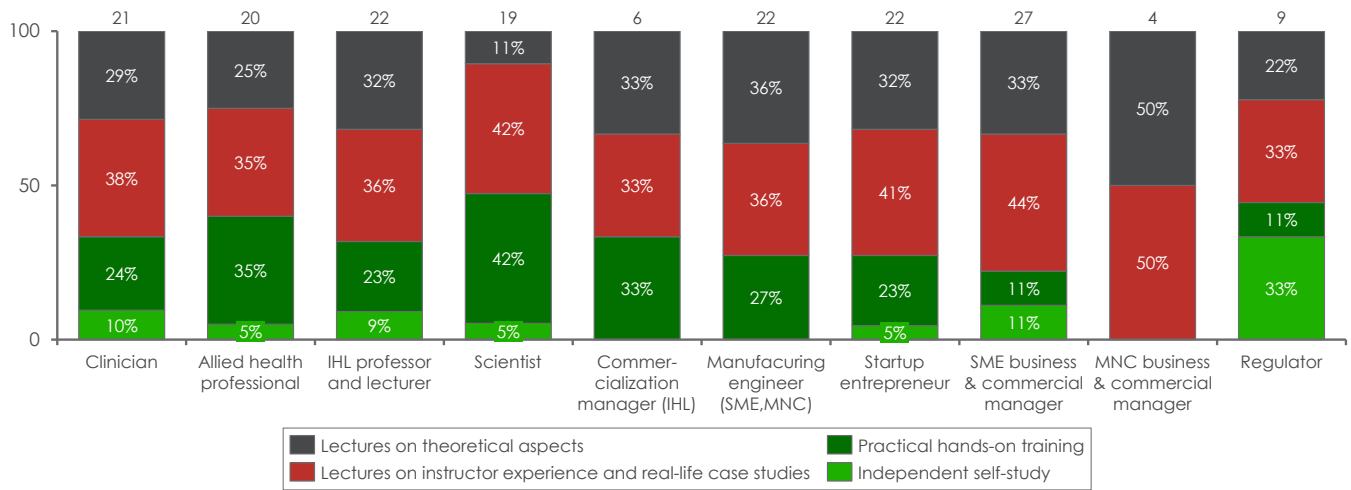
Q: What is your preferred format of delivery for training? [multiple select]

Note: IHL: Institute of higher learning; MNC: Multinational Company; SME: Small-to-medium Enterprise

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)

**FIG.S31. PREFERRED LEARNING METHOD (N=71)**

% of mentions within stakeholder group



Q: What are your preferred ways of learning? [multiple select]

Note: IHL: Institute of higher learning; MNC: Multinational Company; SME: Small-to-medium Enterprise

Source: L.E.K. 2021 MedTech/HealthTech innovation training survey (N = 90)



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