

# 1 Training and Development in Cooperative Hospitals: A Path toward SDG Compliance.

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4

## 5 Abstract

6 Training and development have become key strategies to enhance the capacity of the  
7 healthcare workforce and progress towards Sustainable Development Goal (SDG)  
8 compliance in cooperative hospitals. This review is a compilation of the latest literature  
9 addressing continuing professional development, workforce training, human resource  
10 management practices, simulation-based learning, eLearning and organisational support  
11 systems in healthcare settings. The results have shown that structured and continuous training  
12 systems positively affect workforce competency, satisfaction, organisational commitment,  
13 leadership development, patient care quality, and institutional resilience. Competency-based  
14 programs, supportive organisational climates, and collaborative professional development  
15 programs and the sustainability of the healthcare workforce. There are, however, ongoing  
16 issues to be addressed regarding access to training, technological readiness, contextual  
17 adaptability, policy integration, and training impact assessment. The review highlights the  
18 need for institutional support, a continuous learning culture, and strategic workforce planning  
19 to develop a comprehensive training model that reinforces cooperative hospitals in meeting  
20 healthcare goals in the context of the SDGs. It concludes that adaptive, inclusive and context-  
21 responsive training models are needed to improve healthcare quality, the resilience of the  
22 healthcare workforce and sustainable institutional performance.

23 **Key words:** Cooperative Hospital, Healthcare Workforce, Sustainable Development Goals,  
24 Training and Development, Workforce Sustainability

## 25 26 27 28 29 1. Introduction

30 The study highlights the growing importance of Continuing Professional Development (CPD)  
31 systems for enhancing the capacity and competence of the healthcare workforce. It  
32 emphasises the importance of institutional leadership, involvement of stakeholders, policy  
33 support and regulation of effective CPD frameworks. Despite these developments, there is  
34 still insufficient attention to integrating context-specific learning approaches, policy  
35 coordination, and institutional support systems(Farid et al., 2026; Merry et al., 2023). The  
36 importance of effective CPD systems being based on supportive policies, adult learning  
37 theories and structured professional frameworks that promote ongoing learning and skill  
38 development. The results suggest that flexible delivery of content, quality assurance systems,  
39 sustainable funding and systematic evaluation processes are all important to enhance the  
40 effectiveness of CPD initiatives and engagement by practitioners and sustainability suggest  
41 that CPD needs to be more integrated and flexible in healthcare institutions(Magwenya et al.,  
42 2023). This study explores the theoretical relationships between Strategic Human Resource  
43 Management (SHRM) practices, organizational change processes, and organizational  
44 outcomes, emphasizing the mediating role of change management in enhancing  
45 performance(Surya et al., 2024). The review indicate that digital transformation, industry  
46 context, and sustainability integration are significant contextual factors that influence the  
47 effectiveness and importance of combining professional action with responsible governance  
48 and adaptive digital practices to ensure sustainable performance(Pathinettampadiyan et al.,  
49 n.d.).The study defines Continuing Professional Development (CPD) as a multi-faceted  
50 process that encompasses more than just clinical knowledge and skills, but also encompasses  
51 the skills of leadership, communication, professionalism, teamwork, accountability and  
52 technological competence. It highlights that the effective frameworks for CPD must  
53 encourage lifelong learning through structured and individualised learning, including the use  
54 of personal learning plans(Filipe et al., 2014).

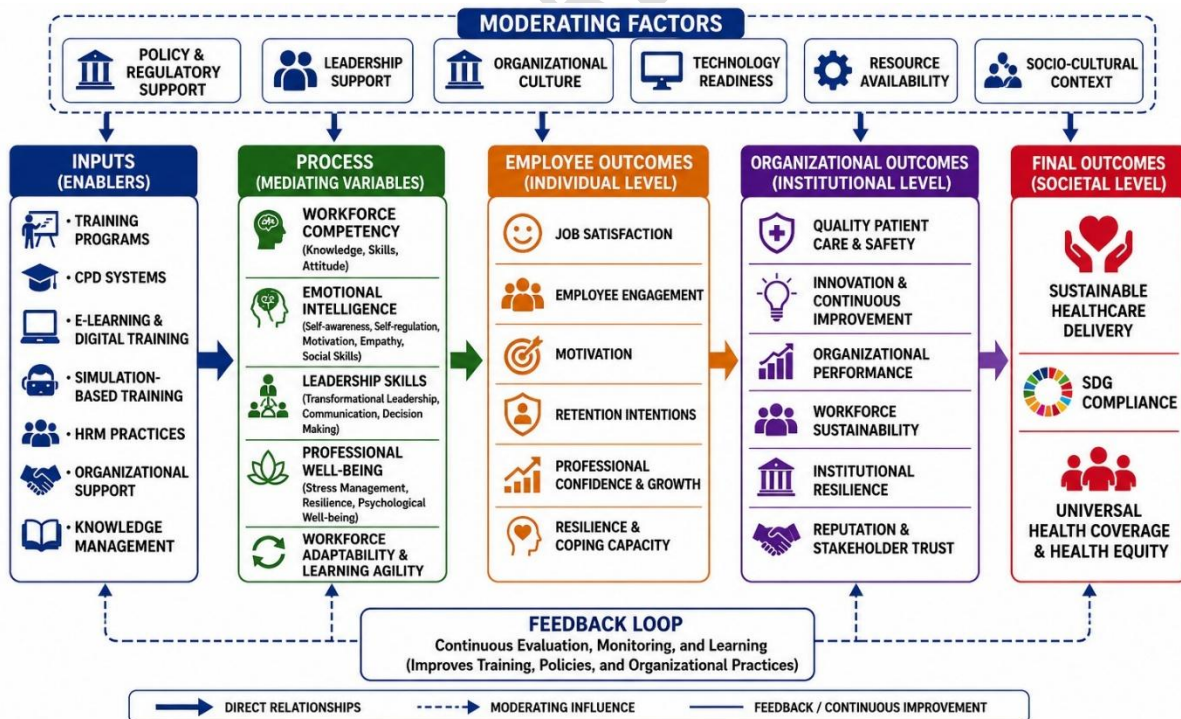
## 55 **2. Conceptual Framework: Training, Development, and CPD in Healthcare**

56 It offers a detailed conceptual understanding of training and development, highlighting that it  
57 is a multidimensional phenomenon with benefits for the individual, the team, the organization  
58 and society. It emphasizes how effective training systems can help enhance skills,  
59 organizational effectiveness, adaptability of the workforce and future career development.  
60 The results indicated that training and development effectiveness is related to the needs  
61 assessment, readiness of the learners(Aguinis & Kraiger, 2009).The results indicate the  
62 theoretical link between workplace participation, skill development and the building of

63 professional identity; that learning is facilitated by ongoing contact with experienced  
64 practitioners and authentic workplaces. The research also shows that apprenticeship training  
65 helps to build work-ready skills, flexibility, and lifelong work capacity. There are however  
66 some gaps in the understanding of how apprenticeship models can be systematically  
67 embedded within contemporary institutional training models, and how they can be adapted to  
68 the changing professional and institutional needs(Billett, 2016).The professional  
69 development (PD) such as continuing medical education and self-directed learning to help  
70 physicians maintain their competence and effectiveness. It emphasises how practitioners use  
71 their experiences in the workplace, the need to respond to the immediate needs of their  
72 patients and their personal awareness to identify learning needs and inform their professional  
73 learning activities(Cook et al., 2017). The study challenges the practice-based learning  
74 strategies that focus on knowledge acquisition and task performance and neglect  
75 developmental and identity forming aspects of learning. It adds a “lifeworld” view to the  
76 conceptualization of learning and professional development as a process of learning “ways of  
77 being” as well as learning skills. The results indicate that there is a theoretical connection  
78 between workplace experiences, personal meaning and professional becoming, which means  
79 that effective learning isn't just about the learning of technical skills, but also the  
80 development of professional values and practices(Dall’Alba & Sandberg, 2010). The study  
81 emphasizes the importance of Continuing Professional Development (CPD) in enhancing the  
82 knowledge, skills, and clinical competence of healthcare professionals, ultimately leading to  
83 better healthcare outcomes. The results indicate however that CPD participation does not  
84 automatically guarantee the effective transfer of learning to practice. The study establishes a  
85 theoretical connection between workplace support, collaborative learning environment,  
86 content of the training and the effective application of the professional learning outcomes(Al-  
87 Omary et al., 2024). The significance importance of various pedagogical strategies,  
88 cooperative learning, and the involvement of participants in achieving effective training  
89 outcomes. The results indicate that customised training programs that are based on their  
90 competency level, professional background, and managerial role improve leadership skills,  
91 interpersonal effectiveness, and innovative working practices. The study also sets up a  
92 theoretical link between contextualised learning, professional interaction and organisational  
93 problem solving capacities(Giovanelli et al., 2024). The Continuing Professional  
94 Development (CPD) as a flexible and accessible tool for enhancing the skills and knowledge  
95 of healthcare professionals throughout their careers. It highlights the importance of the  
96 perceived usefulness, ease of use, institutional support, motivation, habituated use of

97 technology and digital literacy in explaining technological acceptance and engagement in  
 98 digital CPD. The results indicate a high level of theory support between user centred learning  
 99 systems and the willingness of health care professionals to engage in lifelong learning  
 100 activities. The research also suggests that effective eLearning programs are able to overcome  
 101 time, access and work-related barriers to improve professional development opportunities  
 102 (Kelkay et al., 2025). The importance of investing in lifelong learning, skill development and  
 103 workforce competency to improve professional effectiveness and to promote institutional  
 104 sustainability. The study also highlights the fact that past studies have been mostly at the  
 105 macro-economic and development level, with few studies focusing on the institutional level  
 106 of human capital management in healthcare institutions. There are still substantial knowledge  
 107 gaps regarding the relationship between workforce development practices and quality of  
 108 health care, employee health, patient safety, and the adoption of effective HCM systems in  
 109 health care environments(Grigorovica et al., 2022).

110  
 111 **Figure 1. Conceptual Framework Linking Training and Development with SDG**  
 112 **Compliance in Cooperative Hospitals**



113  
 114 **Source:** Developed by the authors based on the reviewed literature

115 **3. Training and Development in Cooperative Hospitals**

116 The importance of in-service training to enhance the competency of healthcare workers, their  
117 satisfaction with their work and the overall performance of the healthcare team in primary  
118 healthcare facilities. It emphasizes the need for continuous training to foster knowledge  
119 building, learning, and professional self-assurance and the importance of the quality and  
120 availability of training to enhance the workforce in a sustainable way(Zhao et al.,  
121 2020).Strategic Human Resource Management (SHRM) attractive organizational  
122 effectiveness within healthcare institutions by aligning human resource practices with broader  
123 strategic objectives(Surya & Tamilmani, n.d.). The study explores how talent management  
124 has developed in the healthcare industry and indicate a strong theoretical linkage between HR  
125 practices, competency development and organizational effectiveness, suggesting that  
126 workforce planning and training programs tailored to address new skill needs are necessary.  
127 The research also highlights the impact of technological progress and workforce dynamics  
128 around the world on healthcare talent management(Ray & Sahu, 2025). Emotional  
129 intelligence is identified as one of the important factors that contribute to professional and  
130 organisational performance, with a particular focus on its influence on leadership  
131 effectiveness, adaptability, resilience, communication and decision making and positively  
132 influence innovation, collaborative practices, and sustainable organizational outcomes. The  
133 results also suggest that emotionally intelligent professionals are better prepared to deal with  
134 uncertainty, to handle work relationships, and to handle changing institutional  
135 situation(Pathinettampadiyan & Thavaraj, 2025). The study highlights the significance of  
136 training and development initiatives in boosting employee satisfaction and overall  
137 effectiveness in healthcare settings. The results indicate a strong theoretical link between  
138 HRD practices and organizational performance, which means that HRD practices are a good  
139 support to employee engagement, retention and service quality in well-designed HRD  
140 practices. There is a lack of understanding, however, regarding the long-term impact of  
141 training strategies and the need for more comprehensive frameworks for workforce  
142 development that meet the changing needs of organizations and health care(Jha et al., 2020).  
143 The study emphasizes the importance of training programmes for not only professional skills  
144 but also for the wider social impacts like gender equality, interprofessional working, and  
145 empowerment of communities. The results indicate a high theoretical link between multi-  
146 level training interventions and sustainable healthcare development and that workforce  
147 development activities have the potential to positively impact institutional effectiveness and  
148 social well-being. The study also highlights the need for the integration of training methods  
149 in the individual, organizational and community level(Leggett et al., 2025). This paper

150 explores the impact of High-Performance Work Systems (HPWS) on employee attitudes and  
151 professional outcomes in healthcare organizations. It emphasizes that HRM practices that  
152 focus on employees have a positive impact on work engagement, job satisfaction, and  
153 affective commitment among health care workers. Results indicate that there is a high level of  
154 theoretical linkage between supportive organizational practices and employee motivation,  
155 which means that good workforce management helps to increase the emotional commitment  
156 of employees to the organization and their performance in the workplace(Padamata &  
157 Vangapandu, 2024).The study highlights the need for Training Needs Assessment (TNA) to  
158 enhance the capacity of the public health workforce and the delivery of public health  
159 services. It emphasises how a good TNA framework can help identify competency gaps,  
160 workforce development priorities and organizational learning needs. The results point to a  
161 strong theoretical connection between the need for systematic needs assessment, the need for  
162 targeted training interventions, and the positive effects on the performance of the workforce,  
163 thus showing that both individual and organizational needs assessments are needed to  
164 properly plan professional development(Czabanowska & Rodriguez Feria, 2024). The  
165 strategic training and development in the field of healthcare management, particularly in the  
166 context of healthcare systems' evolving challenges. It highlights the importance of tailored  
167 training methods to enhance management skills, operational effectiveness, patient care, and  
168 organizational resilience(Willie, 2025).

#### 169 **4. Training, CPD, and SDG Alignment**

170 The study underscores the need for the integration of violence prevention into the overall  
171 framework of the Sustainable Development Goals (SDGs) and the need for indicators of  
172 accountability, policy contexts and institutional partnerships to tackle violence as a multi-  
173 dimensional public health and social problem. The findings offer a theoretical foundation for  
174 the connection between SDG-oriented governance, prevention and positive social outcomes,  
175 and demonstrate how a coordinated implementation of policies can improve the sustainability  
176 and public safety efforts.The study also highlights the importance of using evidence-based  
177 indicators to track progress and inform intervention strategies. There are still some areas of  
178 need to strengthen the development of comprehensive evaluation frameworks and to ensure  
179 effective alignment between the goals of policy, policy mechanisms, and actual violence  
180 prevention results(Lee et al., 2016).The strategic role of nursing and midwifery development  
181 in improving health care systems and supporting universal health coverage and overall  
182 population health objectives. It emphasizes the importance of policy priorities in the fields of

183 education, workforce development, leadership and service delivery to improve the quality  
184 and sustainability of health care. The study also reinforces the need to empower and support  
185 health workers by providing them with opportunities for continuous learning, retaining them  
186 in the workforce, and providing them with safe working environments, which will lead to  
187 better institutional performance and public health results(Organization, 2021). The study  
188 emphasizes the importance of Education for Sustainable Development (ESD) in the context  
189 of achieving the Sustainable Development Goals (SDGs) in the field of interdisciplinary  
190 education and sustainable education. It highlights the importance of ESD in raising  
191 awareness, building knowledge integration and joint participation in solving global  
192 sustainability issues. The study also highlights the importance of informal learning and  
193 partnership-based networks for bolstering regional and global sustainability efforts(Shulla et  
194 al., 2020). The study need to build the global health workforce for sustainable health service  
195 delivery and universal health coverage. It stresses the need for a growing workforce without  
196 neglecting the need for equitable distribution, workforce planning and investment in  
197 healthcare employment systems over the longer term. The results show a theoretical link  
198 between health workforce availability, health system accessibility and health system  
199 resilience, which is strong, and implies that strategic health workforce development is crucial  
200 to respond to future health system needs. But there are still major challenges in closing the  
201 regional workforce inequality gap, equalizing access to resources, and crafting sustainable  
202 approaches to workforce retention, training and institutional support within health  
203 systems(Boniol et al., 2022). The study explores the involvement of healthcare professionals  
204 in Continuing Professional Development (CPD) and identifies the preferred learning methods  
205 as being flexible, work-based, and less time consuming. It highlights the importance of  
206 informal professional learning activities in sustaining health care competencies and in  
207 supporting workplace performance. The results indicate a high degree of theoretical linkage  
208 between the three variables of organizational support, opportunities for training and  
209 healthcare professionals' involvement in CPD activities. The findings also show that  
210 institutional policies, funding mechanisms, and supportive working conditions are crucial in  
211 sustaining professional learning and enhancing the quality of health services. There is still a  
212 lack of action on increasing involvement in more formal, research-based learning activities  
213 and on linking the CPD evaluation systems to the needs of the healthcare workforce,  
214 competency development and long-term professional goals(Nwogbe & Haliso, 2020). The  
215 study emphasizes the need for upskilling and reskilling programs to enhance the agility,  
216 adaptability, and sustainability of workforces in dynamic job markets. The results suggest a

217 strong theoretical connection between the organizational support, skill development strategies  
218 and workforce adaptability, which means that successful learning systems are linked to better  
219 organizational performance and capacity for innovation(Hasan et al., 2024). The importance  
220 of Technical and Vocational Education and Training (TVET) and skills development and  
221 lifelong learning in the context of Sustainable Development Goals (SDGs). It highlights the  
222 importance of embedding skill development in sustainable development agendas to reinforce  
223 the preparedness, employability and institutional capacity-building of the workforce. The  
224 study also suggests that the changing nature of the labour market and technological advances  
225 continue to highlight the need for flexible training systems and ongoing competency  
226 development(Comyn, 2018). The study emphasises the strategic value of Knowledge  
227 Management (KM) implementation to enhance sustainable development in healthcare and  
228 organisational performance. It underscores the importance of the interplay between  
229 organizational conditions, strategic support, government initiatives and performance drivers  
230 in successful KM implementation. The results indicate a robust theoretical link between the  
231 mechanisms of institutional support, knowledge sharing and the outcomes of good healthcare  
232 management. The study also shows that supportive policy environments and innovation  
233 drivers in the health sector have a positive impact on KM adoption and organizational  
234 learning. The study reveals major gaps in implementing comprehensive KM frameworks in  
235 healthcare organizations and proposes better policy support and adaptive management  
236 approaches to improve sustainable knowledge utilization in healthcare systems.(Karamat et  
237 al., 2019). Continuing Professional Development (CPD), as a vital tool for nurses' lifelong  
238 learning, professional competence and skill development in health care settings, is  
239 highlighted. It emphasises that nurses' attitudes and experiences towards CPD have a clear  
240 impact on their involvement in CPD and professional development activities. The results  
241 demonstrate a strong theoretical link between supportive learning environments, professional  
242 motivation and effective competency development, and highlight the importance of  
243 meaningful CPD experiences, which leads to better clinical practice and workforce  
244 confidence(Mlambo et al., 2021). The importance of investing in health workforce education  
245 and training infrastructure and professional development, not just for improving health care  
246 quality and availability, but also for economic growth and job creation. The results provide  
247 strong theoretical support for the connection between workforce availability, competency  
248 building and health system resilience, and demonstrate that strategic investments in medical  
249 and nursing education are crucial for sustainable healthcare delivery. The study also

250 highlights the need for workforce planning, equitable skill distribution, and employment  
251 policies to enhance healthcare outcomes(Karan et al., 2023).

## 252 **5. Impact of Training on Healthcare Outcomes**

253 The importance of debriefing with the team that can be done by the instructor or by the team  
254 itself to improve communication, collaboration, and crisis response skills among healthcare  
255 professionals. The results provide evidence of a robust theoretical connection between  
256 experiential learning, reflective practice and the development of competency in teams,  
257 suggesting that debriefing is a useful and effective method for improving collective decision-  
258 making and operational efficiency in healthcare(Boet et al., 2013). The study explores the  
259 importance of communication skills training in improving health care professionals'  
260 communication with patients in the context of chronic disease management. It highlights the  
261 theoretical connections between effective communication and patient-centered care, shared  
262 decision-making, treatment adherence and better health care experiences. The results suggest  
263 that communication training contributes to competency building and enhances relational  
264 aspects of health service delivery. The study also indicates that while communication training  
265 can be effective, it is not a panacea for improved clinical outcomes in chronic disease  
266 management, as these benefits are not always evident. The review highlights key areas of the  
267 design and implementation of communication training programmes that require further  
268 development, such as the need for more collaborative, context-sensitive, patient-informed  
269 approaches that incorporate the behavioural, organisational, and clinical aspects of healthcare  
270 practice(Yao et al., 2021). The strong theoretical link between supportive workplace  
271 structures, mentorship and successful professional transition in the early years of nursing  
272 practice. The research also suggests that orientation programmes and ongoing guidance play a  
273 role in the preparedness of the workforce and their career growth in the future. But the results  
274 also show that there is also a long way to go in clinical, emotional and social support,  
275 especially when it comes to workload demands and supervision. The findings highlight the  
276 importance of more holistic and responsive support systems to improve retention, resilience  
277 and ongoing sustainable development of the newly qualified nurse(Hussein et al., 2017). The  
278 study highlights the significance of simulation-based education as an innovative method to  
279 clinical competency in healthcare education. It emphasises that medium- and high-fidelity  
280 simulation provides realistic and safe learning contexts to facilitate experiential learning and  
281 development of professional confidence. The study also suggests that simulation could be  
282 beneficial to traditional learning methods if coupled with proper instructional design and

283 context learning requirements(Cant & Cooper, 2010). This review identifies the increasing  
284 importance of eLearning as a strategic means to enhance the continuous professional  
285 development and capacity of healthcare professionals. The literature shows that use of a  
286 variety of eLearning modalities (synchronous, asynchronous, blended, and self-directed)  
287 positively affects knowledge acquisition, professional flexibility, and practice-based learning  
288 outcomes. User-friendliness of the eLearning platform, previous experiences with digital  
289 learning and the correlation between the training content and professional tasks are strongly  
290 correlated with the effectiveness of eLearning. Despite this, several obstacles are still  
291 preventing the adoption of technology, such as low digital literacy, lack of technological  
292 infrastructure, workload pressures, lack of institutional support and limited technological  
293 resources(Aryee et al., 2024). The healthy workplaces for nurses that help to support nurse  
294 well-being, job satisfaction, and quality of health care. It highlights the importance of having  
295 supportive and empowering work environments that can lead to better psychological health,  
296 interpersonal relationships, job performance and retention for nurses. The findings suggest  
297 that organizational climate is strongly linked with the other concepts, including leadership  
298 behaviours, employee engagement in a theoretical sense, and that a positive work climate is  
299 essential to the sustainability of the healthcare delivery system. The study also emphasizes  
300 the need for nurse leadership and organizational approaches that are consistently  
301 implemented to enhance workforce empowerment, leadership development and sustainability  
302 in healthcare systems(Wei et al., 2018).

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## 304 **6. Conclusion**

305 The focus on training, development and Continuing Professional Development (CPD) for  
306 building the capacity of health workers, enhancing their professional competence and  
307 sustaining healthcare delivery is highlighted. The literature has clearly shown that structured  
308 learning systems lead to improvements in clinical knowledge, leadership skills,  
309 communication, adaptability of the workforce, job satisfaction and organizational  
310 effectiveness. The review also provides robust theoretical linkages between continuous  
311 learning, workforce development, human capital enhancement, organizational support and  
312 health care quality outcomes. New learning options such as eLearning, simulation-based  
313 learning, apprenticeship learning and workplace-based professional development have  
314 increased the opportunities for learning within health care institutions that is accessible and

315 flexible. The results also highlight the need to shift away from knowledge-based approaches  
316 to CPD and include learner-centred, context-specific, collaborative and practice-based  
317 approaches. The key elements that were identified as contributing to the success and  
318 sustainability of training programmes were institutional leadership, supportive organisational  
319 culture, policy alignment, accreditation mechanisms, funding support and workforce  
320 planning. Cooperative hospitals can benefit from a well-designed training and development  
321 program to boost employee engagement, confidence, teamwork, service quality, patient  
322 satisfaction, and organizational resilience and sustainability in the long term. Even with these  
323 advances, there are still some problems that are apparent. Limited resources, poor technology,  
324 lack of policy implementation, lack of organizational support, workload pressure, and  
325 unequal access to learning opportunities are still some of the barriers that many healthcare  
326 institutions are facing. Further, current assessment systems tend to be limited to quantifiable  
327 skills and miss other factors like the development of professional identity, long-term  
328 organizational effects, well-being of the workforce, and sustainability results. The review also  
329 identifies areas of gaps in the integration of training systems with new health challenges,  
330 digital transformation and Sustainable Development Goal (SDG) priorities. Cooperative  
331 hospitals and policy makers should focus on designing integrated and flexible CPD systems  
332 that are aligned with the learning of the workforce, health care needs and sustainability.  
333 Additionally, policies and practices should be more robust in supporting the accreditation of  
334 programs, funding for them, and equitable access to professional learning opportunities in  
335 health care, and policies should be more robust in supporting lifelong learning. Additional  
336 studies are also needed to explore context-sensitive learning models, interdisciplinary training  
337 models, adoption of digital learning, resilience of the workforce and the integration of CPD  
338 into SDG-integrated healthcare strategies. The study of the influence of organizational  
339 culture, and technological readiness on the maintenance of professional learning systems  
340 would also help to drive the effective and sustainable development of the healthcare  
341 workforce.

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