Key

If Depth = 1 (items in blue) - > different sections assocaited w/ the survey

If Depth = 2 (items in bold) - > parent code

If Depth = 3 (items not in bold) - > child/thematic code

Provider Codebook

Id	Parent Id	Depth	Title	Description
2	1	1	Acceptability	
3	**2**	**2**	**Advantages**	**Providers' perception of advantages of digital training.**
4	**2**	**2**	**Clarity**	**Providers' thoughts on having sufficient opportunity to have concept clarified during**
5	4	3	Sufficient opportunities for clarity via	Providers who utilized WhatsApp for asking questions for points of clarification.
6	**2**	**2**	**Compare**	**How the training compared to training providers participated in in the past.**
7	6	3	Higher quality	Providers who thought the e-course was higher quality than past in-classroom trainings.
8	6	3	Learning_Compare	Providers' comparison of learnings from digital vs in-person training.
9	6	3	Same information as in-classroom	Providers who thought that the e-course offered the same information as they would normally receive in a classroom setting.
10	**2**	**2**	**Content**	**Providers' perception of the content (understandability, organization, etc).**
11	10	3	Only few found the content fair	Few providers who found the content to be fair or okay while others found it very/well understandable or organized.
12	**2**	**2**	**Disadvantages**	**Providers' perception of disadvantages of digital training.**
13	**2**	**2**	**Easiest**	**Easiest part of the digital training for providers (video, Zoom, WhatsApp chat, reading,**
14	**2**	**2**	**Future e-learning**	**Providers' interest (or their colleagues' interest) in taking digital training for new**
15	14	3	Only one provider who prefers classroom	Provider who would prefer training in-classroom over e-learning; while most showed higher preference for e-learning or mixed.
16	**2**	**2**	**Improve**	**Providers' thoughts on how the training can be improved.**
17	16	3	Better network and internet allowance	Providers who cited that better network and higher internet allowance as ways to
18	16	3	Increase practicum days	Providers who said that the number of practicum days should be increased for those who completed digital didactic training.
19	**2**	**2**	**Incentive**	**Providers' (or their peers') interest in taking an e-class in the future if there was an incentive (educational credits, certificate, letter, per diem etc)**
20	19	3	Value for both monetary and non-monetary incentives	Providers who thought both monetary and monetary incentives would influence them or their peers in taking e-training.
21	**2**	**2**	**Learn effectively**	**Providers' thoughts on if the e-learning allowed them to learn effectively.**
22	21	3	No distractions	Providers who cited lack of distractions as one of the reasons that the e-course allowed
23	**2**	**2**	**Platforms**	**Providers' perceptions of the Zoom calls and WhatsApp groups.**
24	23	3	Liked WhatsApp	The providers that liked the WhatsApp group for morale support, efficiency in getting
25	**2**	**2**	**Preference**	**What providers would have preferred (digital or in-person training).**
26	25	3	Only one provider would have preferred in-	Provider who would have preferred having the hormonal IUD training in-person.
27	**2**	**2**	**Preferred e-training format**	**Providers' preference for e-training format (live, self-paced, or mixed).**
28	27	3	Slightly higher preference for self-paced or pre-	Providers who prefer more self-paced or pre-recorded over more live sessions.

Provider Codebook

29	**2**	**2**	**Printed materials**	**Providers' experience with printing materials and their opinion on how it affected the**
30	29	3	Access to print materials	Few providers who had access to print materials.
31	**2**	**2**	**Quality**	**Providers' perception on the quality of the training.**
32	31	3	High quality	Providers who rated the training as high quality.
33	**2**	**2**	**Questions**	**Providers' perception of how easy/difficult it was to ask questions or have concepts**
34	33	3	How	How providers asked questions (phone calls to trainer and by asking network).
35	33	3	Only few found it not easy to ask questions	Few providers who found that asking questions was not easy (due to network or having
36	**2**	**2**	**Review**	**How providers like to review content and how they reviewed content from previous training (notes, read printed or downloaded materials, watch videos, etc).**
37	36	3	Notes and supplements	Providers who like to review content with notes or notes/supplements (phone, Kaya).
38	1	1	Context	
39	**38**	**2**	**Change**	**What providers would change or improve about the digital training.**
40	39	3	Fix network	Providers who would change issues related to network to improve training.
41	**38**	**2**	**Future considerations**	**What providers would like us to consider for future trainings.**
42	**38**	**2**	**Recommend**	**If providers would or would not recommend this training in the future and reasons.**
43	42	3	Would recommend	Providers who would recommend e-training to peers primarily because they can take the
44	**38**	**2**	**Same**	**What providers would keep the same about the digital training.**
45	44	3	Assistance	Providers who reported keeping assistance for digital training the same.
46	**38**	**2**	**Topic**	**What topic providers would like to be trained on if they could take another digital**
47	1	1	Experience	
48	**47**	**2**	**Assistance**	**Assistance received during training (from who and how).**
49	48	3	Assistance with logging into and navigating	Assistance providers received related to logging into and navigating the Kaya platform.
50	48	3	Family or manager	Assistance providers received from family or manager.
51	48	3	Trainers or people from Kaya platform	Assistance providers received from trainers and from people from Kaya.
52	**47**	**2**	**Disliked**	**What providers disliked about training.**
53	52	3	Log-in issues	Providers' annoyance with log-in issues.
54	52	3	Network issues	Providers' annoyance with network issues.
55	52	3	Questionaires	Providers' challenges with the questionnaire not allowing them to progress.
56	**47**	**2**	**Length**	**Providers' perception of the length of the training, length preference (shorter vs longer) and how long it took them to complete training.**
57	56	3	Effective use of time	Providers' thought on if and how the training was an effective use of their time.
58	56	3	Preferred length	Providers' preference for length (same, longer, shorter) with higher preference for length
59	56	3	Short completion time	How long it took providers to complete training with most of the providers reporting short
60	**47**	**2**	**Liked**	**What providers liked about training.**

Provider Codebook

61	60	3	Insertion module	Providers' enjoyment of the module on insertion.
62	60	3	Self-paced and at leisure	Providers' enjoyment for taking the course at self-pace/ leisure.
63	**47**	**2**	**Location**	**Where providers completed training, if they would pick this location again.**
64	63	3	Both (home and work)	Providers who completed the training at home and at work.
65	63	3	Home	Providers who took training at home.
66	65	4	Home_won't do at home in future	Among providers who completed training at home, those that won't do virtual training at
67	63	3	Work	Providers who took training at work.
68	**47**	**2**	**Logistical challenges**	**Providers' logistical challenges (or lack of challenges) in completing the training including lack of time, support from supervisors etc.**
69	68	3	Ability to get questions answered	Providers having the opportunity to get questions answered as they would in a live
70	68	3	No logistical challenges and felt supported	Providers who experienced no logical challenges and felt supported.
71	68	3	Not sufficient time	Providers not having sufficient time to complete training.
72	**47**	**2**	**Prior e-learning**	**Providers' experience with prior e-learning.**
73	72	3	No prior experience	Providers with no prior experience with e-learning.
74	**47**	**2**	**Sessions**	**How providers completed training sessions (long vs short sessions) and why.**
75	74	3	Smaller sessions_due to work	Among providers who broke training into small session (all), those that reported doing smaller sessions due to work.
76	74	3	Smaller sessions_other reasons	Among providers who broke training into small sessions (all), those that broke training into smaller session due to non-work reasons (family, can only handle 2-3 sessions, to
77	**47**	**2**	**Technical challenges**	**Providers' technical barriers in accessing digital training including network issues, challenges using Kaya, access to internet enabled devices and other technological**
78	77	3	Issues with navigating phone	Providers who had technical challenges related to navigating their phone for this training.
79	77	3	Network issues	Providers' technical challenges related to network.
80	77	3	Platform issues	Providers' technical challenges related to the Kaya platform.
81	1	1	Readiness	
82	**81**	**2**	**Confidence**	**Providers' level of confidence or preparedness to safely provide IUD services (insertion,**
83	82	3	Confidence_Compare	Providers' level of confidence compared to copper IUD training.
84	82	3	Very confident	Among providers that felt confident or ready to provide services, those that felt very
85	**81**	**2**	**Prepared**	**How prepared providers felt going into the practicum after digital training.**
86	85	3	Prepared_Compare	How prepared the providers felt compared to previous trainings.
87	85	3	Ready or very ready	Providers who felt ready for the clinical practicum.

Stakeholder KII Codebook

Id	Parent Id	Depth	Title	Description
89	88	1	Design	
90	**89**	**2**	**Content**	**Administrators' view on the content of the digital training (quality, preparing providers, appearance on device, ability for participants to have questions answered, etc).**
91	90	3	High quality	Key informants' belief that the content of the digital training was of high quality.
92	**89**	**2**	**Improve**	**Administrators' view on how we can improve the design or quality of the digital training.**
93	92	3	Counsel client	Key informants' thoughts on improving the module on counselling clients or increasing social mobilizing efforts.
94	92	3	Increase number of days of practicum	Key informants' thoughts that the number of practicum days should be increased.
95	94	4	Counsel client	Key informants' thoughts on improving the module on counselling clients or increasing social mobilizing efforts
96	**89**	**2**	**Involvement**	**Administrators' involvement in design of digital training.**
97	**89**	**2**	**Overall**	**Administrators' thoughts on how the training was designed (stakeholder engagement, alignment with MoH, considerations of providers/staff/partners, donor priorities, etc).**
98	97	3	High stakeholder engagement	Key informants' thoughts that stakeholders were very or highly engaged throughout the e-learning process.
99	**89**	**2**	**Review**	**Did administrator reivew the content of the digital training?**
100	99	3	Not reviewed	Key informants that did not reviewed the content of the digital training.
101	99	3	Reviewed	Key informants that reviewed the content of the digital training.
102	88	1	Experience	
103	**102**	**2**	**Background**	**Administrators' background and training.**
104	103	3	Medical doctor/officer	Informants' background involves medical doctor, officer, or practitioner.
105	103	3	Nurse	Informants' background involves nursing.
106	**102**	**2**	**Cadres**	**Cadres & sector of health providers that administrator works with.**
107	106	3	Private sector	Informants' cadres involve the private sector.
108	106	3	Public sector	Informants' cadres involve the public sector.

Stakeholder KII Codebook

109	**102**	**2**	**Current role**	**Administrators' current role (how long, data to day responsibilities, etc).**
110	109	3	Family planning	Informants' work involves working to provide, coordinate, or procure commodities for family planning.
111	109	3	Government primary health care	Informants' work involves working with the government to build primary health care systems.
112	**102**	**2**	**e-learning**	**Administrators' experience with prior e-learning approach.**
113	112	3	Internet challenges	Inability for users to connect or stay connected to the training.
114	**102**	**2**	**Involvement in digital IUD training**	**Administrators' involvement in digital hormonal IUD training.**
115	**102**	**2**	**Other digital trainings**	**Administrators' knowledge of any digital (FP or health) trainings in use in Nigeria.**
116	115	3	Enthusiasm	Stakeholders' enthusiasm for the introduction of digital trainings into healthcare in Nigeria.
117	88	1	Feasibility	
118	**117**	**2**	**Benefits**	**Administrators' perspective on the main benefits of digital training.**
119	118	3	Accessible content post-training	Key informants' thoughts on the enjoyment provider receives from being able to review the content any time after training to refresh their skills.
120	118	3	Cost-effective	Key informants' thoughts on the lack of hotel or per diem spending makes the e-learning more cost-effective.
121	**117**	**2**	**Compare**	**Administrators' opinion of how the digital training compares to in-person training (engagement, quality, expense, convenience, etc).**
122	121	3	Provider motivation	Key informants' opinion that providers are more motivated to learn in a digital training setting.
123	**117**	**2**	**Drawbacks**	**Administrators' perspective on the main drawbacks of digital training.**
124	123	3	Internet challenges	Inability for users to connect or stay connected to the training.
125	123	3	Provider digital illiteracy	providers' inability to operate their computer or phone to complete the training
126	**117**	**2**	**Impression**	**Administrators' impression of the digital training.**
127	126	3	Self-paced	Enjoyment of taking the course at the providers own pace/schedule/time.

Stakeholder KII Codebook

128	**117**	**2**	**Incentives**	**Administrators' thoughts on what role incentives (CME credits, certificates, airtime, recognition, per diems, etc) would play in rolling out digital training.**
129	128	3	Certificate	Key informants' thoughts that a certificate would boost provider morale.
130	128	3	Data package	Key informants' thoughts that a data package is necessary for the e-training to be successful.
131	**117**	**2**	**Post-pilot thoughts**	**Change in administrators' thoughts on digital trainings post completion of digital training pilot.**
132	131	3	Mixed digital and in-person approach	Key informants' post-pilot thoughts that it is best to have a mixed digital and in-person approach to hormonal IUD training.
133	88	1	Implementation	
134	**133**	**2**	**Differently**	**What administrators would do differently if they could do it all over again.**
135	134	3	Increase number of days of practicum	Key informants' thoughts that the number of practicum days should be increased.
136	**133**	**2**	**Evidence Gaps**	**Administrators' thoughts on remaining evidence gaps for scaling the digital training and how we might fill them.**
137	136	3	Attrition	Key informants' thoughts that the attrition rate of provider participants need to be further examined.
138	136	3	Client demand creation	Key informants' thoughts that client demand creation for IUDs need to be better weaved into the e-training and post training follow-up.
139	**133**	**2**	**Involvement**	**Administrators' involvement in implementation of digital training.**
140	**133**	**2**	**Lessons**	**Administrators' thoughts on the biggest lessons learned from digital training on hormonal IUD.**
141	140	3	Cost-effective	Key informants' thoughts on the lack of hotel or per diem spending makes the e-learning more cost-effective.
142	140	3	FP counseling benefits	Key informants' thoughts that the training benefits more than just IUD technical training but holistically benefits FP providers in thinking about counseling.
143	**133**	**2**	**Not well**	**Administrators' thoughts on what didn't work well for the implementation of the digital pilot.**
144	143	3	Internet challenges	Inability for users to connect or stay connected to the training.

Stakeholder KII Codebook

145	**133**	**2**	**Scale Gaps**	**What administrators would like to know before supporting scaling of digital approach.**
146	145	3	Client demand creation	Key informants' thoughts that client demand creation for IUDs need to be better weaved into the e-training and post training follow-up
147	**133**	**2**	**Surprise**	**What surprised administrators about their experience in implementing the training.**
148	147	3	Improvised commodities	Key informants' were surprised at the ability for clinical supervisors to improvise with commodities that they had available in the practicum setting.
149	**133**	**2**	**Well**	**Administrators' thoughts on what worked well for the implementation of the digital pilot.**
150	149	3	Educative	Key informants' belief that the content of the digital training was educative.
151	88	1	Scaling	
152	**151**	**2**	**Challenges by sector**	**Administrators' thoughts on how the challenges vary by sector (public vs private) for scaling.**
153	152	3	Public sector staff shortages	Key informants' thoughts that there is attrition of providers and managers on the public sector.
154	**151**	**2**	**Change**	**Administrators' thoughts on what would need to be done/changed before scaling (content, packaging, platform, incentives, certification, etc).**
155	154	3	Increase number of days of practicum	Key informants' thoughts that the number of practicum days should be increased.
156	154	3	Promotional Campaign	Key informants' thoughts that there should be a promotional campaign for the e-training targeted at providers.
157	154	3	Provider digital literacy orientation	Key informants' thoughts that there should be an orientation session for providers on digital literacy before the e-trainiing commences.
158	**151**	**2**	**Combined**	**Administrator's thoughts on role of in-person trainings when combined with digital trainings.**
159	158	3	In-person practicum requirement	Key informants' thoughts on the necessity of an in-person practicum/ supervision if e-learning is to replace classroom training.
160	**151**	**2**	**Continue**	**Administrators' thoughts on continuing digital training for hormonal IUD in their state/district after the COVID-19 restrictions are lifted.**

Stakeholder KII Codebook

161	160	3	Enthusiasm	Key informants' thoughts that they should enthusiastically continue the training post-COVID-19 restrictions.
162	**151**	**2**	**Engagement**	**Administrators' thoughts on who would need to be engaged/brought into the process (authorizations, approval, monitoring, expansion, etc) for scaling.**
163	162	3	local government	Key informants' thoughts that local government should be engaged with the digital training.
164	162	3	Program managers	Key informants' thoughts that program managers should be engaged with the digital training.
165	**151**	**2**	**Future**	**Administrators' thoughts on role of in-person trainings when combined with scale up of digital trainings.**
166	165	3	Enthusiasm	Key informants' thoughts that they should enthusiastically scale-up the training in Nigeria.
167	**151**	**2**	**Other training**	**Administrators' thoughts using digital approach for other new methods introduced in their state/district.**
168	**151**	**2**	**Resources**	**Administrators' thoughts on if the resources required to implement digital trainings are reasonable and available and what additional resources would be needed for scaling.**
169	168	3	Internet & android devices	Key informants' thoughts that the government should invest in both internet infrastructure and provide android devices to providers.
170	**151**	**2**	**Scale challenges**	**What administrators see as challenges and barriers to scaling the digital training (financial, human resources, policy, technology, etc).**
171	170	3	Expanding pool of trainers	Key informants' thoughts that there is a need to grow the pool of master trainers for the e-training programs.
172	170	3	Internet & android devices	Key informants' thoughts that there is a lack of internet coverage and digital gadgets for providers.

Clinical Supervisor Codebook

Id	Parent Id	Depth	Title	Description
174	173	1	Acceptability	
175	**174**	**2**	**Benefit**	**Supervisors' thoughts on the benefits of the digital training.**
176	175	3	Accessible content post-training	Supervisors' enjoyment that providers can review the content any time after training to refresh their skills.
177	175	3	Cost-effective	Supervisors' thoughts that the lack of hotel or per diem spending makes the e-learning more cost-effective.
178	175	3	Self-paced	Enjoyment of taking the course at the providers own pace/schedule/time
179	**174**	**2**	**Compare**	**Supervisors' thoughts on how digital training compares to in-person training.**
180	179	3	Time-saving	Supervisors' thoughts that the digital learning is more time-saving for providers and supervisors than the in-person training
181	**174**	**2**	**Drawbacks**	**Supervisors' thoughts on the drawbacks of the digital training (engagement, questions, networking, access, etc).**
182	181	3	Internet challenges	Inability for providers to connect or stay connected to the training.
183	181	3	Provider digital illiteracy	Annoyance of provider inability to operate their computer or phone to complete the training.
184	**174**	**2**	**Preference**	**Supervisors' preference to supervise providers who have been trained digitally vs in-person, if given the choice.**
185	184	3	Accessible content post-training	Preference for e-training since providers can review the content any time during or after training to refresh their skills.
186	184	3	Provider enthusiasm	Preference for e-training since providers were more enthusiastic/content to learn digitally.
187	**174**	**2**	**Replacing classroom training**	**Supervisors' thoughts on replacing in-person training with digital training and if it changed now that they have supervised clinical practicums with providers who received digital training.**
188	187	3	In-person practicum requirement	Supervisor's thoughts on the necessity of an in-person practicum/ supervision if e-learning is to replace classroom training.
189	173	1	Competency & readiness	
190	**189**	**2**	**Challenges_practicum**	**Challenges and knowledge gaps observed among providers during clinical practicum and why.**
191	190	3	Unavailability of commodities	Supervisor's perception on the unavailability of hormonal IUD commodities in the setting of the practicum.
192	**189**	**2**	**Clinical practicum**	**Supervisors' perception of the readiness of the providers they supervised for hands-on clinical practicum (knowledge, counseling, insertion, removal, etc).**

Clinical Supervisor Codebook

193	192	3	Face-to-face encouragement	Supervisors' perception that face-to-face encouragement was crucial during the practicum to reinforce knowledge from the virtual modules.
194	192	3	High readiness	Supervisors' perception that providers who took the modules were very “ready” or “prepared” for the clinical practicum.
195	**189**	**2**	**Compare_readiness**	**Supervisors' perception of the readiness of the health care providers trained digitally compared to those trained in-person and why.**
196	195	3	Smaller supervisor to provider ratio	Supervisor’s perception that the practicum pods are smaller than traditional classrooms and provide more focused feedback to providers.
197	**189**	**2**	**Proportion**	**Comparison of proportion of providers who reached clinical competency after in classroom LARC trainings vs digital training.**
198	197	3	Majority	Supervisor’s perception that the majority of providers reached competency after digital training.
199	**189**	**2**	**Service provision**	**Supervisors' perception of the readiness of the provider for hormonal IUD service provision and counseling after hands-on clinical practicum.**
200	199	3	High readiness	Supervisors' perception that providers who took the modules were very “ready” or “prepared” after the clinical practicum.
201	**189**	**2**	**Supervision**	**Supervisors' thoughts on if it’s more work to service providers who have been digitally trained vs trained in-person.**
202	201	3	Equal	Supervisors’ perception that it is the same or equal amount of work to supervisor those who have been digitally trained vs trained in-person
203	201	3	Satisfaction	Supervisors’ perception that is more satisfying to supervisor providers during the digital training than the in-person training.
204	**189**	**2**	**Weakness**	**Supervisors' observation of areas of weakness among providers trained digitally (comprehension, number of insertions/removals, time, etc) and context.**
205	173	1	Impressions	
206	**205**	**2**	**Challenges_providers**	**Challenges providers experienced during training.**
207	206	3	Internet Challenges	Inability for providers to connect or stay connected to the training
208	206	3	Lack of counselling	Inability for providers to provide sufficient counselling on the IUD and other family planning methods before insertion.
209	**205**	**2**	**Challenges_supervisors**	**Challenges supervisor encountered during training.**
210	209	3	Internet challenges	Inability to connect or stay connected to the training
211	**205**	**2**	**Compare_experience**	**How supervisors' experience with online training compares to using an in-person approach.**
212	211	3	Self-paced	Taking the course at the providers own pace/schedule/time.

Clinical Supervisor Codebook

213	**205**	**2**	**Disliked**	**What supervisor disliked about the training.**
214	213	3	Provider digital illiteracy	Annoyance of provider inability to operate their computer or phone to complete the training
215	**205**	**2**	**Liked**	**What supervisors liked about the training (eg. ability of providers to get questions answered).**
216	215	3	Accessible question-asking	Ease to ask/answer provider questions during the training
217	215	3	Flexible Location	Enjoyment of taking the course in a location of the providers' choosing.
218	215	3	Follow-up supervision requests	Enjoyment of receiving provider request for follow-up supervision to maintain quality of services post-training.
219	215	3	Self-Paced	Enjoyment of taking the course at the providers own pace/schedule/time.
220	**205**	**2**	**Materials**	**Supervisors' impression of the training materials & modules (content, appearance, ability to engage audience/keep people interested, quality of information, etc).**
221	220	3	Intelligible	Materials (content, appearance, ability to engage audience/keep people interested, quality of information, etc) easily understood by providers and supervisors.
222	173	1	Scale-up	
223	**222**	**2**	**Challenges_scale**	**Supervisors' thoughts on barriers or challenges to scaling up training.**
224	223	3	Internet challenges	Inability to connect or stay connected to the training.
225	223	3	Unavailability of commodities	Supervisors' perception on the unavailability of hormonal IUD commodities in the setting of the practicum and clinics.
226	**222**	**2**	**Combined**	**Supervisors' thoughts on role of in-person trainings when combined with digital trainings.**
227	226	3	Accessible content post-training	Supervisors' enjoyment that providers can review the content any time after training to refresh their skills.
228	**222**	**2**	**Future**	**Supervisors' thoughts on if digital training approach should be scaled up in Nigeria, why and how.**
229	228	3	Accessible content post-training	Supervisors' enjoyment that providers can review the content any time after training to refresh their skills.
230	228	3	Time-saving	Supervisors' thoughts that the digital learning is more time-saving for providers and supervisors than the in-person training.
231	**222**	**2**	**Improvement**	**Supervisors' suggestions for improving the digital training and the readiness of providers for the hands-on clinical supervision (content, training methodology, types of providers to target, etc).**
232	231	3	Commodity availability	Supervisors' belief that commodities for the hormonal IUD training should be provided in clinic.

Clinical Supervisor Codebook

233	231	3	Data stipend	Supervisors' belief that a sufficient data stipend be provided for providers to last the duration of the e-training.
234	231	3	Immediate Live-client practicum	Supervisors belief that the live client practicum should come immediately after the model practicum so that providers do not forget the information of the training.