WEBVTT

1 00:00:02.490 --> 00:00:07.080 <v ->We're very delighted to have Gila Neta,</v>

2 00:00:07.080 --> 00:00:11.690 who is a Program Director for Implementation Science

3 00:00:11.690 --> 00:00:13.230 in the Office of the Director

4 00:00:13.230 --> 00:00:17.190 in the Division of Cancer Control and Population Sciences

5 00:00:17.190 --> 00:00:19.530 at the National Cancer Institute.

6 00:00:19.530 --> 00:00:23.460 And Gila has actually been a leader

7 00:00:23.460 --> 00:00:28.260 in stimulating implementation science approaches

8 00:00:28.260 --> 00:00:31.680 to cancer prevention at the NCI for,

9 00:00:31.680 --> 00:00:35.130 I'm not sure how many years, 10 or even 15 years.

10 00:00:35.130 --> 00:00:40.130 And encouraging research in this area, and fixing concepts

11 00:00:41.400 --> 00:00:45.385 and theories of how to approach this sort of work,

12 00:00:45.385 --> 00:00:50.385 and yeah, we just look to her for, in terms of cancer

13 00:00:52.290 --> 00:00:56.640 and implementation science, she is the top person.

14 00:00:56.640 --> 00:00:59.520 So we're thrilled to have her here today.

15 00:00:59.520 --> 00:01:04.230 And we just found out that NCI and NIH people

16 00:01:04.230 --> 00:01:07.710 are allowed to travel, but we weren't able to arrange that

17 00:01:07.710 --> 00:01:09.060 in time for today.

18 00:01:09.060 --> 00:01:11.280 So maybe we'll have her back another time

19 00:01:11.280 --> 00:01:13.440 where we can meet with her in person.

20 00:01:13.440 --> 00:01:15.480 But I just wanted to give a little more information

21 00:01:15.480 --> 00:01:18.510 about her background before turning this over to her.

22 00:01:18.510 --> 00:01:22.107 This talk is sponsored by the Center for Methods

23 00:01:22.107 --> 00:01:24.660 and Implementation and Prevention Science

24 00:01:24.660 --> 00:01:26.640 here at the Yale School of Public Health

25 00:01:26.640 --> 00:01:28.170 and it's co-sponsored

26 00:01:28.170 --> 00:01:31.140 by the Department of Chronic Disease Epidemiology,

27 00:01:31.140 --> 00:01:35.700 led by Judy Liman, the chair, and also by the Yale Scholars

28 00:01:35.700 --> 00:01:38.850 in Implementation Science Career Development Program,

29 00:01:38.850 --> 00:01:43.560 our K12 program, which is actually funded by NHLBI,

30 00:01:43.560 --> 00:01:46.020 but I think there are a number of people involved

31 00:01:46.020 --> 00:01:49.500 who also are interested in cancer prevention and control,

32 00:01:49.500 --> 00:01:52.893 and implementation science perspectives for that.

33 00:01:54.150 --> 00:01:58.530 So Gila is the NCI Scientific lead

34 00:01:58.530 --> 00:02:00.030 for funding announcements

35 00:02:00.030 --> 00:02:03.540 and dissemination implementation research and health,

36 00:02:03.540 --> 00:02:06.330 and assists with research and training activities

37 00:02:06.330 --> 00:02:09.840 related to implementation science across the division.

38 00:02:09.840 --> 00:02:12.990 And she has a secondary appointment within the Epidemiology

39 00:02:12.990 --> 00:02:14.730 and Genomics Research Program

40 00:02:14.730 --> 00:02:17.190 and the Center for Global Health.

41 00:02:17.190 --> 00:02:18.720 And something I know about Gila

42 00:02:18.720 --> 00:02:21.390 that isn't in her biography is, I think she,

43 00:02:21.390 --> 00:02:24.750 you can correct me if I'm wrong, PhD Epidemiologist.

44 00:02:24.750 --> 00:02:28.530 So you came to implementation science through epidemiology,

45 00:02:28.530 --> 00:02:33.530 which is interesting and not the most common path.

46 00:02:33.960 --> 00:02:36.150 Most people come to implementation science

47 00:02:36.150 --> 00:02:38.490 through social sciences,

48 00:02:38.490 --> 00:02:42.120 so it's nice to have a PhD epidemiologist

49 00:02:42.120 --> 00:02:45.033 leading implementation science at NCI.

50 00:02:45.900 --> 00:02:48.600 Dr. Neta's programmatic and research interests

51 00:02:48.600 --> 00:02:51.540 within implementation science include training,

52 00:02:51.540 --> 00:02:55.920 portfolio analysis, the use of the PRECIS criteria

53 00:02:55.920 --> 00:02:57.780 in evaluating pragmatic trials.

54 00:02:57.780 --> 00:02:59.673 Is that the correct pronunciation?

55 00:03:01.380 --> 00:03:02.580 <v ->Yeah, PRECIS.</v>

56 00:03:02.580 --> 00:03:03.413 <v ->PRECIS.</v>

57 00:03:03.413 --> 00:03:04.246 Okay.

58 00:03:04.246 --> 00:03:05.103 I did take French.

59 00:03:06.870 --> 00:03:08.880 And that's something we actually covered in the course

60 00:03:08.880 --> 00:03:11.640 I'm offering this semester on advanced methods

61 00:03:11.640 --> 00:03:14.040 for implementation and prevention science.

62 00:03:14.040 --> 00:03:16.380 Shared decision-making and cancer screening,

63 00:03:16.380 --> 00:03:19.410 economic evaluation, de-implementation,

64 00:03:19.410 --> 00:03:21.940 which we were just discussing on an earlier call

65 00:03:22.800 --> 00:03:26.160 and the use of standardized measurement and reporting.

66 00:03:26.160 --> 00:03:29.910 Dr. Neta's co-chair of the NIH-sponsored Annual Conference

67 00:03:29.910 --> 00:03:32.520 on the Science of Dissemination and Implementation,

68 00:03:32.520 --> 00:03:35.460 which many of us have participated in for many years

69 00:03:35.460 --> 00:03:37.800 and had a very nice representation

70 00:03:37.800 --> 00:03:39.750 from the Yale School of Public Health

71 00:03:39.750 --> 00:03:41.280 and the Yale Medical School.

72 00:03:41.280 --> 00:03:45.090 She also leads the NIH D&I working group,

73 00:03:45.090 --> 00:03:48.990 a trans-NIH initiative providing leadership and vision

74 00:03:48.990 --> 00:03:52.320 for implementation science across the NIH.

75 00:03:52.320 --> 00:03:55.770 Today she'll be talking about opportunities and priorities

76 00:03:55.770 --> 00:03:58.410 for dissemination and implementation research

77 00:03:58.410 --> 00:04:00.360 at the National Cancer Institute.

78 00:04:00.360 --> 00:04:03.420 So Dr. Neta, I'm pleased to turn the mic

79 00:04:03.420 --> 00:04:04.253 and screen over to you.

80 00:04:04.253 --> 00:04:07.440 We're really looking forward to your talk today.

81 00:04:07.440 --> 00:04:08.820 <v ->Great, thank you so much, Donna.</v>

82 00:04:08.820 --> 00:04:12.840 And I should clarify that I don't lead

83 00:04:12.840 --> 00:04:14.790 the NCI Implementation Science.

84 00:04:14.790 --> 00:04:17.040 David Chambers is definitely our fearless leader,

85 00:04:17.040 --> 00:04:19.860 although he does primarily come from mental health.

86 00:04:19.860 --> 00:04:22.620 But I would say NCI as our team,

87 00:04:22.620 --> 00:04:25.740 I'm on a large implementation science team

88 00:04:25.740 --> 00:04:27.900 and we are seen as leaders across the NIH,

89 00:04:27.900 --> 00:04:30.870 which is great because I have fantastic colleagues

90 00:04:30.870 --> 00:04:33.240 and we are truly an interdisciplinary team.

91 00:04:33.240 --> 00:04:35.010 So I do think, Donna, what you said is correct,

92 00:04:35.010 --> 00:04:38.730 that I'm the lead epidemiologist in implementation science

93 00:04:38.730 --> 00:04:42.700 at NCI, in part, 'cause I'm the only epidemiologist

94 00:04:43.770 --> 00:04:45.030 in implementation science.

95 00:04:45.030 --> 00:04:48.270 But it might be worth mentioning how I came to this

96 00:04:48.270 --> 00:04:52.380 as I was, I did my postdoc in radiation epidemiology

97 00:04:52.380 --> 00:04:54.240 and the questions that were most interesting to me

98 00:04:54.240 --> 00:04:57.120 at that time, and that was when papers were coming out

99 00:04:57.120 --> 00:05:00.813 about excess deaths due to unnecessary CT scans.

100 00:05:01.920 --> 00:05:03.570 And so I was really interested in the question

101 00:05:03.570 --> 00:05:06.180 of how do we de-implement, how do we de-implement

102 00:05:06.180 --> 00:05:09.180 this practice of unnecessary CT scans

103 00:05:09.180 --> 00:05:11.640 while I was doing my epidemiologic research

104 00:05:11.640 --> 00:05:15.900 on the risk of thyroid cancer associated

105 00:05:15.900 --> 00:05:19.710 with medical diagnostic radiation.

106 00:05:19.710 --> 00:05:21.990 But what I was really sort of passionate about,

107 00:05:21.990 --> 00:05:23.550 were asking those bigger questions.

108 00:05:23.550 --> 00:05:27.090 So now I'm working with this very transdisciplinary team

109 00:05:27.090 --> 00:05:32.090 at NCI and we consist of health services, researchers,

110 00:05:32.670 --> 00:05:35.103 anthropologists, psychologists.

111 00:05:36.780 --> 00:05:41.280 So it's just a fantastic, MBAs, MPAs.

112 00:05:41.280 --> 00:05:43.923 So, fantastic Team.

113 00:05:44.940 --> 00:05:48.540 One question I wanted to ask before we share the slides,

114 00:05:48.540 --> 00:05:52.200 just to get a sense, and I don't know if it's easy

115 00:05:52.200 --> 00:05:54.243 for people to raise their hands.

116 00:05:55.410 --> 00:05:59.820 I believe raising your hand is an ability,

117 00:05:59.820 --> 00:06:00.653 I'm curious.

118 00:06:00.653 --> 00:06:02.220 <v Donna>If you go down to reactions</v>

119 00:06:02.220 --> 00:06:03.780 and you click on reactions,

120 00:06:03.780 --> 00:06:07.830 and then you'll see raise hand under reactions.

121 00:06:07.830 --> 00:06:10.470 <v ->So I would love it if folks could raise their hand</v>

122 00:06:10.470 --> 00:06:13.980 if you are an epidemiologist.

123 00:06:13.980 --> 00:06:15.843 I'm just curious to get a sense.

124 00:06:16.950 --> 00:06:18.090 Okay, great.

125 00:06:18.090 --> 00:06:18.923 Oh, that's great.

126 00:06:18.923 --> 00:06:20.853 It's even summarizing how many,

127 00:06:21.990 --> 00:06:24.870 so we've got some epidemiologists in the group.

128 00:06:24.870 --> 00:06:27.570 Can I see a show of hands of how many folks

129 00:06:27.570 --> 00:06:31.473 have actually submitted a grant in implementation science?

130 00:06:36.300 --> 00:06:39.210 <v Donna>You have to lower your hand and then re-raise it.</v>

131 00:06:39.210 --> 00:06:40.710 <v ->Yeah, no, I see people lower.</v>

132 00:06:40.710 --> 00:06:42.330 Okay, now lower your hands.

133 00:06:42.330 --> 00:06:45.603 And maybe last question is,

134 00:06:50.250 --> 00:06:55.190 or two, a two-part question, raise your hand if you are new

135 00:06:56.280 --> 00:06:58.293 to implementation science.

136 00:07:05.730 --> 00:07:06.630 Okay, great.

137 00:07:06.630 --> 00:07:08.703 So a significant portion of you,

138 00:07:10.770 --> 00:07:15.030 I'm glad that I anticipated that an introduction

139 00:07:15.030 --> 00:07:18.630 to what implementation science is would be helpful

140 00:07:18.630 --> 00:07:22.590 in addition to describing funding opportunities,

141 00:07:22.590 --> 00:07:24.183 resources, and priorities.

142 00:07:25.080 --> 00:07:26.640 <v Donna>It will be helpful, Dr. Neta.</v>

143 00:07:26.640 --> 00:07:27.750 <v ->Great.</v>

144 00:07:27.750 --> 00:07:28.740 Okay, great.

145 00:07:28.740 --> 00:07:30.900 So with that then, William,

146 00:07:30.900 --> 00:07:33.310 if you don't mind sharing my slides

147 00:07:35.250 --> 00:07:38.700 and as Donna mentioned the title, the official title

148 00:07:38.700 --> 00:07:40.560 of my talk is "Opportunities and Priorities

149 00:07:40.560 --> 00:07:42.930 for Dissemination and Implementation Research

150 00:07:42.930 --> 00:07:44.637 at the National Cancer Institute".

151 00:07:46.080 --> 00:07:48.300 Summarizing that as implementation science

152 00:07:48.300 --> 00:07:51.780 fits cleaner on the slide, but also what I'm going to share

153 00:07:51.780 --> 00:07:55.590 with you, I do sit on the implementation science team,

154 00:07:55.590 --> 00:07:58.860 but we do use dissemination and implementation research

155 00:07:58.860 --> 00:08:00.930 and health sometimes interchangeably

156 00:08:00.930 --> 00:08:03.330 with implementation science.

157 00:08:03.330 --> 00:08:06.360 And as I'll describe a little bit later in my talk

158 00:08:06.360 --> 00:08:08.730 for the purposes of our funding opportunities,

159 00:08:08.730 --> 00:08:11.340 we do think of implementation science

160 00:08:11.340 --> 00:08:13.860 as those two different component parts.

161 00:08:13.860 --> 00:08:17.010 So I'll explain a little bit about that later.

162 00:08:17.010 --> 00:08:21.720 But basically, on the next slide, I just wanna summarize

163 00:08:21.720 --> 00:08:26.130 what I'm hoping to do over the next 50 minutes with you

164 00:08:26.130 --> 00:08:30.240 or 49 minutes with you, which is give you

165 00:08:30.240 --> 00:08:32.940 a brief background on what is implementation science

166 00:08:32.940 --> 00:08:34.830 and why should we care.

167 00:08:34.830 --> 00:08:36.840 Then do what Donna asked me to do,

168 00:08:36.840 --> 00:08:39.390 which is talk about opportunities and priorities

169 00:08:39.390 --> 00:08:41.160 in implementation science at NCI.

170 00:08:41.160 --> 00:08:44.010 So I'm really hoping to wet your appetite in this field

171 00:08:44.010 --> 00:08:46.080 and then hoping that you will reach out to me

172 00:08:46.080 --> 00:08:47.940 or any folks on my team

173 00:08:47.940 --> 00:08:50.110 to take advantage of these opportunities

174 00:08:51.180 --> 00:08:54.360 and where our priorities may align with yours.

175 00:08:54.360 --> 00:08:59.160 Great to explore ways to collaborate

176 00:08:59.160 --> 00:09:02.280 and synergize those efforts.

177 00:09:02.280 --> 00:09:04.410 And then finally, how can you learn more?

178 00:09:04.410 --> 00:09:08.010 So on the next slide, just starting with

179 00:09:08.010 --> 00:09:10.923 what is implementation science and why we should care?

180 00:09:12.240 --> 00:09:15.270 So first wanted to start with just simple definitions

181 00:09:15.270 --> 00:09:19.440 on the next slide, which is distinguishing the difference

182 00:09:19.440 --> 00:09:22.830 between implementation science from implementation practice.

183 00:09:22.830 --> 00:09:24.240 And I think in my,

184 00:09:24.240 --> 00:09:26.730 I guess it's a little more than eight years

185 00:09:26.730 --> 00:09:29.310 that I've been a program director on the team

186 00:09:29.310 --> 00:09:31.440 and speaking with PIs,

187 00:09:31.440 --> 00:09:33.870 I've realized sometimes this distinction

188 00:09:33.870 --> 00:09:36.150 is not always clear upfront.

189 00:09:36.150 --> 00:09:39.330 So implementation practice is simply using interventions

190 00:09:39.330 --> 00:09:41.280 in healthcare and public health settings.

191 00:09:41.280 --> 00:09:42.600 And perhaps, I shouldn't say simply

192 00:09:42.600 --> 00:09:45.090 because that's complicated as well,

193 00:09:45.090 --> 00:09:48.600 but implementation science is focused on studying the use

194 00:09:48.600 --> 00:09:50.820 of those interventions in healthcare

195 00:09:50.820 --> 00:09:55.050 and public health settings and specifically studying methods

196 00:09:55.050 --> 00:09:58.230 and strategies to promote the uptake, the adoption,

197 00:09:58.230 --> 00:10:00.633 and integration of that evidence into practice.

198 00:10:02.880 --> 00:10:06.210 So why should we care about studying those things?

199 00:10:06.210 --> 00:10:09.330 Why do we need to focus on those methods and strategies?

200 00:10:09.330 --> 00:10:11.460 So on the next slide, I highlight an example

201 00:10:11.460 --> 00:10:14.070 that shouldn't come as a surprise to anyone.

202 00:10:14.070 --> 00:10:17.280 I think COVID has really highlighted the importance

203 00:10:17.280 --> 00:10:19.290 of thinking about implementation.

204 00:10:19.290 --> 00:10:22.230 It's not enough to just think about what intervention.

205 00:10:22.230 --> 00:10:25.740 So we saw with COVID that it wasn't enough

206 00:10:25.740 --> 00:10:27.930 to just come up with a vaccine.

207 00:10:27.930 --> 00:10:32.790 While that was phenomenal and I mean just an amazing feat

208 00:10:32.790 --> 00:10:37.080 of science that we had these highly effective vaccines.

209 00:10:37.080 --> 00:10:41.250 As you see on the next slide, and as you well remember,

210 00:10:41.250 --> 00:10:43.653 the rollout was slow and complicated.

211 00:10:45.180 --> 00:10:48.480 Anxiety was growing, shots were slow to reach arms

212 00:10:48.480 --> 00:10:51.480 as those final steps of ensuring vaccine delivery

213 00:10:51.480 --> 00:10:53.283 were left to beleaguered states.

214 00:10:54.360 --> 00:10:56.100 And I think on the next slide,

215 00:10:56.100 --> 00:10:58.920 you'll see that Dr. Ashish Jha, who's now dean

216 00:10:58.920 --> 00:11:01.680 of the Brown University School of Public Health

217 00:11:01.680 --> 00:11:04.200 really nicely articulated the problem.

218 00:11:04.200 --> 00:11:07.200 And that was that the federal government saw their role

219 00:11:07.200 --> 00:11:09.510 as getting vaccines to the states

220 00:11:09.510 --> 00:11:12.000 without considering what support states would need

221 00:11:12.000 --> 00:11:13.860 to get vaccines to the people.

222 00:11:13.860 --> 00:11:15.990 And this type of problem, as you all know,

223 00:11:15.990 --> 00:11:18.253 is not unique to COVID-19.

224 00:11:20.073 --> 00:11:22.350 So on the next slide, you'll see that the promise

225 00:11:22.350 --> 00:11:25.800 of any effective innovation that our science delivers

226 00:11:25.800 --> 00:11:28.020 can only be fully realized through its use

227 00:11:28.020 --> 00:11:32.070 by a range of stakeholders and attending to a range

228 00:11:32.070 --> 00:11:34.890 of different types of barriers held by those stakeholders.

229 00:11:34.890 --> 00:11:37.470 So while the vaccine was highly desired,

230 00:11:37.470 --> 00:11:39.060 there was still a significant portion,

231 00:11:39.060 --> 00:11:42.060 and continues to be a significant portion of the population,

232 00:11:42.060 --> 00:11:43.740 who continues to refuse to take it.

233 00:11:43.740 --> 00:11:48.740 So how do we deliver our innovations most effectively?

234 00:11:49.710 --> 00:11:52.800 Is it, A, not thinking about implementation?

235 00:11:52.800 --> 00:11:55.260 B, thinking about implementation with a plan

236 00:11:55.260 --> 00:11:57.000 informed by intuition?

237 00:11:57.000 --> 00:11:58.710 Or C, having a plan informed

238 00:11:58.710 --> 00:12:01.653 by empirical evidence, the signs of implementation?

239 00:12:02.790 --> 00:12:04.920 So too often we don't focus on thinking about

240 00:12:04.920 --> 00:12:07.020 and generating the necessary evidence

241 00:12:07.020 --> 00:12:08.673 to inform implementation.

242 00:12:10.080 --> 00:12:13.860 And on the next slide, I think this won't be new to you,

243 00:12:13.860 --> 00:12:16.110 but what this slide illustrates is what happens

244 00:12:16.110 --> 00:12:19.080 if we don't also focus on implementation.

245 00:12:19.080 --> 00:12:23.160 And Donna's center highlights this as well, noting this gap.

246 00:12:23.160 --> 00:12:27.120 But what this displays to give you the story

247 00:12:27.120 --> 00:12:31.260 behind that 17 year gap, these are findings of a study

248 00:12:31.260 --> 00:12:34.020 from 2000 by Andrew Balas and Sue Boren

249 00:12:34.020 --> 00:12:37.200 that asked the question, let's assume that the end product

250 00:12:37.200 --> 00:12:40.170 of our research is simply a high-impact publication,

251 00:12:40.170 --> 00:12:43.350 an RCT on the effectiveness of an innovation.

252 00:12:43.350 --> 00:12:46.080 What happens next if we're not thinking about implementation

253 00:12:46.080 --> 00:12:47.760 and not attending to it?

254 00:12:47.760 --> 00:12:49.800 So what you see in the middle of the slide

255 00:12:49.800 --> 00:12:52.710 is the rough publication pathway from publication

256 00:12:52.710 --> 00:12:55.620 of our original research to implementation,

257 00:12:55.620 --> 00:12:59.730 which they defined in this paper as 50% uptake.

258 00:12:59.730 --> 00:13:01.800 So on the left side of the slide you see all the ways

259 00:13:01.800 --> 00:13:05.190 we lose valuable evidence and on the right side

260 00:13:05.190 --> 00:13:06.990 it estimates about how long it takes

261 00:13:06.990 --> 00:13:09.870 to get through each one of these steps.

262 00:13:09.870 --> 00:13:12.090 And on the next slide, you see the punchline

263 00:13:12.090 --> 00:13:15.630 that it takes 17 years for only 14%

264 00:13:15.630 --> 00:13:18.510 of original research to benefit patients.

265 00:13:18.510 --> 00:13:20.190 So it shouldn't be the case that so little

266 00:13:20.190 --> 00:13:21.900 takes so long and that's the time

267 00:13:21.900 --> 00:13:24.870 to reach just half of the people who could benefit.

268 00:13:24.870 --> 00:13:26.583 We need to do a better job.

269 00:13:27.510 --> 00:13:30.780 And on the next slide, just wanted to mention,

270 00:13:30.780 --> 00:13:32.430 Balas and Boren looked at a range

271 00:13:32.430 --> 00:13:33.510 of healthcare interventions,

272 00:13:33.510 --> 00:13:35.730 but specifically for cancer control,

273 00:13:35.730 --> 00:13:37.620 this time lag is not much better,

274 00:13:37.620 --> 00:13:39.783 as you can see from this recent review.

275 00:13:42.900 --> 00:13:44.250 So on the next slide,

276 00:13:44.250 --> 00:13:47.340 and as you saw with the COVID-19 vaccine example,

277 00:13:47.340 --> 00:13:49.170 the problem really goes beyond the strength

278 00:13:49.170 --> 00:13:51.300 of the evidence for effectiveness.

279 00:13:51.300 --> 00:13:53.790 An intervention is going to be only as good as how

280 00:13:53.790 --> 00:13:56.400 and whether it is adopted by the different systems

281 00:13:56.400 --> 00:13:59.490 within different communities and that we can identify

282 00:13:59.490 --> 00:14:01.920 the relevant practitioners who can then be trained

283 00:14:01.920 --> 00:14:04.470 to deliver the intervention.

284 00:14:04.470 --> 00:14:07.380 But we can't stop with training and education.

285 00:14:07.380 --> 00:14:08.970 I've often seen a lot of applications

286 00:14:08.970 --> 00:14:10.560 that are simply focused on training,

287 00:14:10.560 --> 00:14:13.140 thinking education will be enough, but we have a history

288 00:14:13.140 --> 00:14:15.390 and we know this, that training is not enough,

289 00:14:15.390 --> 00:14:17.220 because we have a history of training providers

290 00:14:17.220 --> 00:14:20.010 where there isn't then a way to come back from that training

291 00:14:20.010 --> 00:14:23.070 and incorporate the intervention into routine practice.

292 00:14:23.070 --> 00:14:25.710 So we need to think about the barriers to doing that,

293 00:14:25.710 --> 00:14:28.800 attending to those, and making sure we also consider

294 00:14:28.800 --> 00:14:33.090 the needed supports to ensure that delivery and integration.

295 00:14:33.090 --> 00:14:35.610 And we need to make sure that once those trained providers

296 00:14:35.610 --> 00:14:37.830 are able to deliver the intervention

297 00:14:37.830 --> 00:14:39.810 and have the needed supports,

298 00:14:39.810 --> 00:14:41.790 that they can also reach all those people

299 00:14:41.790 --> 00:14:43.690 who could potentially benefit from it.

300 00:14:44.940 --> 00:14:46.137 So on the next slide,

301 00:14:46.137 --> 00:14:48.990 and I don't believe this is the next slide,

302 00:14:48.990 --> 00:14:51.843 the next slide is, even one more,

303 00:14:52.800 --> 00:14:55.650 even if we get halfway there at each of these steps,

304 00:14:55.650 --> 00:14:58.800 not accounting for issues with access, adherence, dosage,

305 00:14:58.800 --> 00:15:01.710 and maintenance, we are down to just a fraction

306 00:15:01.710 --> 00:15:03.480 of the benefit that we thought we were going to have

307 00:15:03.480 --> 00:15:05.850 with that promising intervention.

308 00:15:05.850 --> 00:15:07.830 And we need to make sure that we don't assume these steps

309 00:15:07.830 --> 00:15:09.573 are going to happen by themselves.

310 00:15:11.760 --> 00:15:13.770 So how can we accelerate the time it takes

311 00:15:13.770 --> 00:15:15.570 for our evidence to be implemented?

312 00:15:15.570 --> 00:15:19.050 On the next slide, you can see here,

313 00:15:19.050 --> 00:15:21.840 on the left side, you see effective interventions

314 00:15:21.840 --> 00:15:24.930 such as vaccines, technologies, and treatments.

315 00:15:24.930 --> 00:15:26.970 On the right side of the slide, you see our goal

316 00:15:26.970 --> 00:15:29.910 to decrease the burden of disease or cancer.

317 00:15:29.910 --> 00:15:32.730 And in the middle, you see some reasons why there's a gap

318 00:15:32.730 --> 00:15:34.620 from the intervention to its intended effect.

319 00:15:34.620 --> 00:15:37.140 It's that challenge of implementation.

320 00:15:37.140 --> 00:15:40.590 So interventions are often underused and overused

321 00:15:40.590 --> 00:15:42.570 and this has been highlighted during the COVID pandemic,

322 00:15:42.570 --> 00:15:45.390 of course, but as similarly true as those of you

323 00:15:45.390 --> 00:15:48.450 in chronic diseases, it being known this is also true

324 00:15:48.450 --> 00:15:49.800 for cancer control measures

325 00:15:49.800 --> 00:15:52.530 and other chronic disease measures.

326 00:15:52.530 --> 00:15:54.570 And some reasons for that implementation gap

327 00:15:54.570 --> 00:15:57.780 include insufficient training, infrastructure, governance,

328 00:15:57.780 --> 00:16:00.900 and policies to provide the needed supports

329 00:16:00.900 --> 00:16:03.000 to deliver interventions.

330 00:16:03.000 --> 00:16:03.833 On the next slide,

331 00:16:03.833 --> 00:16:07.920 you can see that through implementation science

332 00:16:07.920 --> 00:16:11.220 we can understand those implementation barriers,

333 00:16:11.220 --> 00:16:14.100 and develop, and importantly develop and test,

334 00:16:14.100 --> 00:16:17.280 strategies to overcome those barriers.

335 00:16:17.280 --> 00:16:20.220 So on the final slide, on the next slide,

336 00:16:20.220 --> 00:16:25.220 final slide of this picture, if you advance one more,

337 00:16:25.830 --> 00:16:28.923 how do we know if those strategies are working?

338 00:16:30.120 --> 00:16:33.420 As you will find out, here we go.

339 00:16:33.420 --> 00:16:36.270 Those strategies should improve the feasibility

340 00:16:36.270 --> 00:16:38.880 and acceptability of an intervention.

341 00:16:38.880 --> 00:16:40.980 Ensure delivery is cost-effective

342 00:16:40.980 --> 00:16:44.850 and can reach as many people as possible, ensure fidelity

343 00:16:44.850 --> 00:16:47.220 so that the intervention works as it's intended,

344 00:16:47.220 --> 00:16:49.590 that we can see high rates of uptake

345 00:16:49.590 --> 00:16:51.930 and sustain the intervention over time.

346 00:16:51.930 --> 00:16:54.510 So these are really critical outcomes that we seek

347 00:16:54.510 --> 00:16:56.580 to advance through implementation science

348 00:16:56.580 --> 00:17:00.330 and that our strategies are intended to improve,

349 00:17:00.330 --> 00:17:04.470 to ensure that we can promote the adoption and integration

350 00:17:04.470 --> 00:17:06.490 of interventions into practice

351 00:17:07.380 --> 00:17:09.300 by developing and testing strategies

352 00:17:09.300 --> 00:17:11.580 to advance these implementation outcomes,

353 00:17:11.580 --> 00:17:13.860 and generating evidence on these strategies

354 00:17:13.860 --> 00:17:16.980 which can improve our ability to ultimately decrease

355 00:17:16.980 --> 00:17:17.940 the burden of cancer

356 00:17:17.940 --> 00:17:20.553 through effective data-driven implementation.

357 00:17:21.570 --> 00:17:23.910 On the next slide, I just wanted to give you an example

358 00:17:23.910 --> 00:17:25.833 of what this looks like in practice.

359 00:17:27.266 --> 00:17:29.820 And I realize many of you may be interested

360 00:17:29.820 --> 00:17:30.653 in global health.

361 00:17:30.653 --> 00:17:35.340 So I pulled two examples of studies that NCI funded

362 00:17:35.340 --> 00:17:38.790 and that's the example of testing a strategy,

363 00:17:38.790 --> 00:17:42.810 a general strategy, of task shifting to address the barrier

364 00:17:42.810 --> 00:17:45.270 of limited access to cancer control intervention.

365 00:17:45.270 --> 00:17:49.650 So task shifting is a broad strategy to enhance access

366 00:17:49.650 --> 00:17:51.960 through decentralization of care,

367 00:17:51.960 --> 00:17:55.440 and we funded these two studies to test specific types

368 00:17:55.440 --> 00:17:57.990 of task-shifting strategies to increase the uptake

369 00:17:57.990 --> 00:18:00.450 of different cancer control interventions

370 00:18:00.450 --> 00:18:02.670 in two LMIC countries.

371 00:18:02.670 --> 00:18:07.200 So interestingly both found a threefold increase in uptake

372 00:18:07.200 --> 00:18:09.240 with these two different approaches,

373 00:18:09.240 --> 00:18:11.790 suggesting that this strategy of task-shifting

374 00:18:11.790 --> 00:18:14.490 can be broadly effective to address a range

375 00:18:14.490 --> 00:18:17.343 of global cancer control implementation challenges.

376 00:18:19.890 --> 00:18:22.260 So on the next slide, I just wanna clarify

377 00:18:22.260 --> 00:18:24.870 that task shifting is one example,

378 00:18:24.870 --> 00:18:27.570 but there are a whole host of implementation strategies

379 00:18:27.570 --> 00:18:30.540 that have been identified, and tested, and developed,

380 00:18:30.540 --> 00:18:33.060 and studied in the literature,

381 00:18:33.060 --> 00:18:36.000 you see these nine categories,

382 00:18:36.000 --> 00:18:38.700 but these categories were actually grouping,

383 00:18:38.700 --> 00:18:42.390 I think it was about 73 different strategies

384 00:18:42.390 --> 00:18:47.390 that through a systematic review had been identified.

385 00:18:48.180 --> 00:18:52.540 And this paper from Byron Powell et al. in 2015

386 00:18:54.030 --> 00:18:56.430 talks about those 73 strategies

387 00:18:56.430 --> 00:18:58.530 and these different categories.

388 00:18:58.530 --> 00:19:00.810 But just to give you a sense of what these things are,

389 00:19:00.810 --> 00:19:02.910 these include things like strategies to educate

390 00:19:02.910 --> 00:19:05.253 and train practitioners, as I've mentioned,

391 00:19:06.300 --> 00:19:09.180 as well as strategies to ensure that those practitioners

392 00:19:09.180 --> 00:19:13.140 can incorporate the intervention into the workflow

393 00:19:13.140 --> 00:19:15.390 and integrate it into community settings,

394 00:19:15.390 --> 00:19:19.680 providing that interactive or technical assistance,

395 00:19:19.680 --> 00:19:21.903 strategies to support fidelity,

396 00:19:23.490 --> 00:19:25.920 and other supports for clinicians.

397 00:19:25.920 --> 00:19:27.120 Also at the front end,

398 00:19:27.120 --> 00:19:31.290 really ensuring stakeholder buy-in, building relationships

399 00:19:31.290 --> 00:19:35.250 among stakeholders as needed, engaging consumers,

400 00:19:35.250 --> 00:19:39.090 and importantly, financial strategies,

401 00:19:39.090 --> 00:19:41.190 as well as thinking about whether there might be a need

402 00:19:41.190 --> 00:19:44.820 to change the infrastructure to deliver the intervention.

403 00:19:44.820 --> 00:19:48.090 So how would you select these range of strategies?

404 00:19:48.090 --> 00:19:50.460 And in your research proposals, in particular,

405 00:19:50.460 --> 00:19:54.630 it will be really dependent on what barriers

406 00:19:54.630 --> 00:19:56.640 you are seeking to overcome,

407 00:19:56.640 --> 00:19:59.370 what resources you are able to leverage,

408 00:19:59.370 --> 00:20:02.190 and the critical implementers or other stakeholders

409 00:20:02.190 --> 00:20:05.283 who you are seeking to affect.

410 00:20:07.290 --> 00:20:10.500 So on the next slide you'll see in terms of thinking

411 00:20:10.500 --> 00:20:15.030 about who those stakeholders are in implementation science,

412 00:20:15.030 --> 00:20:19.290 we recognize that intervention and innovation delivery

413 00:20:19.290 --> 00:20:21.360 is really context-dependent

414 00:20:21.360 --> 00:20:23.400 and there are a range of multilevel factors

415 00:20:23.400 --> 00:20:25.290 that can influence that.

416 00:20:25.290 --> 00:20:26.913 And so on the next slide,

417 00:20:28.380 --> 00:20:30.750 engaging stakeholders at all of these levels.

418 00:20:30.750 --> 00:20:33.270 So thinking beyond that relationship between a provider

419 00:20:33.270 --> 00:20:36.600 and a consumer, but also taking into account

420 00:20:36.600 --> 00:20:39.360 the organization in which that provider is working,

421 00:20:39.360 --> 00:20:41.850 the community in which that organization exists,

422 00:20:41.850 --> 00:20:44.910 and what higher-level policies may be needed

423 00:20:44.910 --> 00:20:49.713 to put in place in order for those things to be possible.

424 00:20:50.820 --> 00:20:53.430 And when we've historically ignored these levels,

425 00:20:53.430 --> 00:20:55.020 we often leave out populations

426 00:20:55.020 --> 00:20:56.760 who don't have as good access to care.

427 00:20:56.760 --> 00:20:59.970 So this is really critical in thinking about equity as well.

428 00:20:59.970 --> 00:21:02.130 How do we best get organizational change?

429 00:21:02.130 --> 00:21:04.140 How do we best get communities and states

430 00:21:04.140 --> 00:21:06.783 to support implementation of these interventions?

431 00:21:07.800 --> 00:21:10.260 And so it is particularly important to engage stakeholders

432 00:21:10.260 --> 00:21:12.540 at all of these levels to build the evidence base

433 00:21:12.540 --> 00:21:15.273 to support implementation at each of these levels.

434 00:21:16.800 --> 00:21:20.050 So on the next slide, I had mentioned earlier

435 00:21:20.910 --> 00:21:24.660 the distinction, how we define implementation science,

436 00:21:24.660 --> 00:21:28.710 and the component parts of implementation science.

437 00:21:28.710 --> 00:21:31.500 So this is how we think of it at NCI

438 00:21:31.500 --> 00:21:33.330 and these definitions come from

439 00:21:33.330 --> 00:21:35.670 our trans-NIH funding opportunities,

440 00:21:35.670 --> 00:21:38.070 which I'll talk about in a few slides.

441 00:21:38.070 --> 00:21:40.170 But we see implementation science broadly

442 00:21:40.170 --> 00:21:42.300 as bridging the gap between research, and practice,

443 00:21:42.300 --> 00:21:44.820 and policy by building a knowledge base

444 00:21:44.820 --> 00:21:47.640 on how evidence can be most effectively communicated

445 00:21:47.640 --> 00:21:49.890 and integrated into practice.

446 00:21:49.890 --> 00:21:53.400 And so for the purposes of our funding announcements,

447 00:21:53.400 --> 00:21:55.830 we break it down into these two different components

448 00:21:55.830 --> 00:21:58.290 where dissemination research is the study

449 00:21:58.290 --> 00:22:00.990 of the targeted distribution of information

450 00:22:00.990 --> 00:22:04.140 and how best to spread or sustain knowledge and evidence.

451 00:22:04.140 --> 00:22:06.330 Whereas implementation research is focused on

452 00:22:06.330 --> 00:22:09.750 what strategies can best facilitate the adoption

453 00:22:09.750 --> 00:22:12.603 and integration of evidence into a given practice.

454 00:22:13.770 --> 00:22:15.750 So on the next slide, I just wanna break down

455 00:22:15.750 --> 00:22:16.583 a little bit further.

456 00:22:16.583 --> 00:22:19.980 The goal of dissemination research is really to understand

457 00:22:19.980 --> 00:22:23.310 how, when, by whom, and under what circumstances

458 00:22:23.310 --> 00:22:27.270 evidence most effectively spreads focusing on all the stages

459 00:22:27.270 --> 00:22:30.150 of evidence from its creation to its reception.

460 00:22:30.150 --> 00:22:32.850 And these are important steps that we often jump over.

461 00:22:34.410 --> 00:22:35.973 So in the next slide,

462 00:22:36.900 --> 00:22:39.570 focusing more on the implementation research

463 00:22:39.570 --> 00:22:43.650 and what we try to draw contrast from what you typically see

464 00:22:43.650 --> 00:22:47.430 in effectiveness trials, which tend to focus on the what,

465 00:22:47.430 --> 00:22:50.460 what intervention can improve health outcomes?

466 00:22:50.460 --> 00:22:52.770 And most studies assume that if we focus on the what

467 00:22:52.770 --> 00:22:54.900 we will get the answers that we need,

468 00:22:54.900 --> 00:22:57.600 what do we need to do for the these individuals

469 00:22:57.600 --> 00:23:01.170 in this population to improve a range of health outcomes?

470 00:23:01.170 --> 00:23:03.930 But we often jump over, through doing this,

471 00:23:03.930 --> 00:23:06.150 we jump over this important middle

472 00:23:06.150 --> 00:23:08.430 which is seen on the next slide.

473 00:23:08.430 --> 00:23:11.070 And that's the question of how,

474 00:23:11.070 --> 00:23:13.860 how can we ensure those interventions are delivered?

475 00:23:13.860 --> 00:23:16.590 So what are those implementation strategies

476 00:23:16.590 --> 00:23:18.690 that will support our ability

477 00:23:18.690 --> 00:23:20.580 to deliver those interventions?

478 00:23:20.580 --> 00:23:23.460 And you can see here in the implementation outcomes

479 00:23:23.460 --> 00:23:25.230 that I had mentioned earlier,

480 00:23:25.230 --> 00:23:27.030 those outcomes that those strategies

481 00:23:27.030 --> 00:23:28.890 are intended to improve.

482 00:23:28.890 --> 00:23:31.590 And so how do we know those strategies are working,

483 00:23:31.590 --> 00:23:33.930 in implementation science we're really focused on

484 00:23:33.930 --> 00:23:36.960 understanding what strategies, what methods

485 00:23:36.960 --> 00:23:39.460 can improve implementation

486 00:23:43.140 --> 00:23:46.200 and focusing on the implementation of something

487 00:23:46.200 --> 00:23:47.460 that is evidence-based.

488 00:23:47.460 --> 00:23:51.900 So for those of you who are thinking about implementation,

489 00:23:51.900 --> 00:23:54.060 it's very important that this really is the science

490 00:23:54.060 --> 00:23:56.760 of implementing evidence.

491 00:23:56.760 --> 00:24:00.660 It's also increasingly I brought up de-implementation.

492 00:24:00.660 --> 00:24:02.820 We're also interested in thinking about

493 00:24:02.820 --> 00:24:05.130 where it may not be an evidence-based intervention,

494 00:24:05.130 --> 00:24:06.690 but something is being implemented

495 00:24:06.690 --> 00:24:09.270 that is not evidence-based, then you would flip it,

496 00:24:09.270 --> 00:24:11.610 and it would be implementation strategies

497 00:24:11.610 --> 00:24:14.163 to reduce the use of those things.

498 00:24:15.930 --> 00:24:17.730 Just wanted to mention that as an aside

499 00:24:17.730 --> 00:24:18.660 because that is something

500 00:24:18.660 --> 00:24:20.703 that we are also very interested in.

501 00:24:21.570 --> 00:24:25.350 So by focusing here we see this knock on benefit

502 00:24:25.350 --> 00:24:28.233 of improving service outcomes and health outcomes.

503 00:24:30.090 --> 00:24:33.450 So, on the next slide,

504 00:24:33.450 --> 00:24:36.090 just reiterating what we mean by those strategies,

505 00:24:36.090 --> 00:24:38.490 it's really developing and testing,

506 00:24:38.490 --> 00:24:41.940 here are a range of strategies that have been studied

507 00:24:41.940 --> 00:24:45.390 but focusing again on that question of what are the barriers

508 00:24:45.390 --> 00:24:48.210 that you're observing for your evidence-based intervention

509 00:24:48.210 --> 00:24:50.250 or innovation, whatever it is that you're trying

510 00:24:50.250 --> 00:24:54.540 to implement, understanding why it's not being implemented

511 00:24:54.540 --> 00:24:57.840 or perhaps in some cases, you see in certain places

512 00:24:57.840 --> 00:24:59.280 it's being implemented very well

513 00:24:59.280 --> 00:25:01.430 and you wanna understand why that might be,

514 00:25:03.300 --> 00:25:06.180 and then trying to overcome those barriers.

515 00:25:06.180 --> 00:25:09.570 So on the next couple slides I just wanna mention

516 00:25:09.570 --> 00:25:12.510 that in implementation science,

517 00:25:12.510 --> 00:25:15.330 a lot of this work really hinges on theories, frameworks,

518 00:25:15.330 --> 00:25:16.163 and models.

519 00:25:16.163 --> 00:25:18.030 So I'm gonna review just a few.

520 00:25:18.030 --> 00:25:19.890 And the reason why these are valuable

521 00:25:19.890 --> 00:25:22.590 and as an epidemiologist, I was not trained in theories,

522 00:25:22.590 --> 00:25:25.140 frameworks, and models, but I've come to appreciate,

523 00:25:25.140 --> 00:25:27.990 I mean we learned about DAGs, the directed acyclic graphs

524 00:25:27.990 --> 00:25:31.590 because we need some sort of basis to inform

525 00:25:31.590 --> 00:25:35.343 what variables we include in our regression models.

526 00:25:36.900 --> 00:25:38.610 But as Donna mentioned,

527 00:25:38.610 --> 00:25:40.830 this is also very much a social sciences,

528 00:25:40.830 --> 00:25:44.100 behavioral science, and implementation science

529 00:25:44.100 --> 00:25:46.230 is truly a transdisciplinary science,

530 00:25:46.230 --> 00:25:51.150 and I think epidemiologists are a real asset for the field.

531 00:25:51.150 --> 00:25:53.130 But in terms of thinking about,

532 00:25:53.130 --> 00:25:55.560 in terms of developing measurement methods,

533 00:25:55.560 --> 00:25:58.410 but in terms of understanding what are those barriers,

534 00:25:58.410 --> 00:26:01.080 I think that that's where social and behavioral scientists

535 00:26:01.080 --> 00:26:02.253 can really help us.

536 00:26:03.480 --> 00:26:05.340 Through these theories and frameworks

537 00:26:05.340 --> 00:26:07.590 is understanding what are those drivers.

538 00:26:07.590 --> 00:26:11.700 So here you see one of the oldest theories in the field,

539 00:26:11.700 --> 00:26:14.310 Roger's Diffusion of Innovations theory,

540 00:26:14.310 --> 00:26:16.110 which actually comes from agronomy.

541 00:26:16.110 --> 00:26:18.177 And in fact, because implementation science

542 00:26:18.177 --> 00:26:20.520 and health is a relatively new field,

543 00:26:20.520 --> 00:26:23.610 a lot of our theories, and frameworks, and methods

544 00:26:23.610 --> 00:26:26.280 are borrowed from other fields.

545 00:26:26.280 --> 00:26:30.240 And so in this case, what Everett Rogers highlighted

546 00:26:30.240 --> 00:26:35.240 was that what influences our ability to adopt and deliver

547 00:26:37.620 --> 00:26:41.280 is not just the characteristics of the intervention itself

548 00:26:41.280 --> 00:26:43.590 but also the organizational characteristics,

549 00:26:43.590 --> 00:26:45.480 the environmental context.

550 00:26:45.480 --> 00:26:48.570 And those are the types of things that can influence

551 00:26:48.570 --> 00:26:52.740 or impede our ability to adopt and implement something.

552 00:26:52.740 --> 00:26:57.090 So on the next slide, this is the consolidated framework

553 00:26:57.090 --> 00:26:58.650 for implementation research.

554 00:26:58.650 --> 00:27:01.830 Those of you who are less new to the field

555 00:27:01.830 --> 00:27:04.140 I'm sure are very familiar with this.

556 00:27:04.140 --> 00:27:07.140 But this was actually developed in 2009

557 00:27:07.140 --> 00:27:09.590 from Laura Dan Schroeder at the VA and colleagues

558 00:27:10.650 --> 00:27:15.650 where they identified a range of constructs of categories,

559 00:27:16.590 --> 00:27:17.700 which you can see are similar

560 00:27:17.700 --> 00:27:19.770 to what Everett Rogers laid out.

561 00:27:19.770 --> 00:27:22.470 There's the inner setting, and the outer setting,

562 00:27:22.470 --> 00:27:24.330 as well as the intervention characteristics.

563 00:27:24.330 --> 00:27:26.460 And I realize this graph is a little bit confusing

564 00:27:26.460 --> 00:27:28.470 so I'm gonna take a moment to walk through it

565 00:27:28.470 --> 00:27:31.920 'cause I actually think it's popular for a reason.

566 00:27:31.920 --> 00:27:36.360 I think they really do a great job of describing the range

567 00:27:36.360 --> 00:27:41.220 of constructs that can influence our ability to implement.

568 00:27:41.220 --> 00:27:44.370 And a few things that they add

569 00:27:44.370 --> 00:27:46.230 to what Everett Rogers had posited,

570 00:27:46.230 --> 00:27:49.050 as you see on the left side of the slide,

571 00:27:49.050 --> 00:27:51.630 the intervention as unadapted.

572 00:27:51.630 --> 00:27:53.460 And so we think of interventions

573 00:27:53.460 --> 00:27:55.110 as having their core components

574 00:27:55.110 --> 00:27:58.230 and that's what you need to ensure fidelity.

575 00:27:58.230 --> 00:28:00.720 But there's also an adaptable periphery

576 00:28:00.720 --> 00:28:02.820 and on the left side, you see it doesn't quite fit.

577 00:28:02.820 --> 00:28:04.563 There's some white space there.

578 00:28:05.520 --> 00:28:07.470 But this bottom part that they added

579 00:28:07.470 --> 00:28:11.880 is this critical iterative process of planning,

580 00:28:11.880 --> 00:28:16.880 of engaging stakeholders, of implementing and iterating,

581 00:28:16.890 --> 00:28:19.800 of assessing your ability to implement

582 00:28:19.800 --> 00:28:21.810 and testing those strategies.

583 00:28:21.810 --> 00:28:25.080 The hope is that you can get to the right side of the slide

584 00:28:25.080 --> 00:28:28.290 where now you have an adapted intervention

585 00:28:28.290 --> 00:28:30.720 that fits much better into the context

586 00:28:30.720 --> 00:28:32.040 in which it is delivered.

587 00:28:32.040 --> 00:28:35.610 Understanding that both that inner and outer context

588 00:28:35.610 --> 00:28:36.900 are critical.

589 00:28:36.900 --> 00:28:39.420 And what's really nice is there's a whole website

590 00:28:39.420 --> 00:28:42.780 for CFIR that describes all of these constructs

591 00:28:42.780 --> 00:28:45.030 and they're also SIRC,

592 00:28:46.620 --> 00:28:50.490 the Society for Implementation Research Collaboration,

593 00:28:50.490 --> 00:28:53.730 they've created, unfortunately it's behind a paywall,

594 00:28:53.730 --> 00:28:56.190 but there are a whole host of measures

595 00:28:56.190 --> 00:28:58.620 that have been developed, validated,

596 00:28:58.620 --> 00:29:01.950 and tested to measure these constructs as well.

597 00:29:01.950 --> 00:29:03.210 So I think that's one reason

598 00:29:03.210 --> 00:29:05.490 why this is very popular framework.

599 00:29:05.490 --> 00:29:07.560 You don't have to invent these things from scratch.

600 00:29:07.560 --> 00:29:10.710 There are existing tools to measure these constructs

601 00:29:10.710 --> 00:29:13.110 to understand what those barriers are

602 00:29:13.110 --> 00:29:15.570 and perhaps what their relative weights are

603 00:29:15.570 --> 00:29:16.980 to help you decide on

604 00:29:16.980 --> 00:29:19.173 where you can most appropriately intervene.

605 00:29:20.010 --> 00:29:22.443 So on the next slide, last, oh

606 00:29:27.300 --> 00:29:29.760 and I wanted to mention also the re-aim framework,

607 00:29:29.760 --> 00:29:32.520 which is another popular framework in the field.

608 00:29:32.520 --> 00:29:34.860 It's often been used as an evaluation framework,

609 00:29:34.860 --> 00:29:37.310 but I think it nicely highlights what are the key questions

610 00:29:37.310 --> 00:29:38.700 in implementation science.

611 00:29:38.700 --> 00:29:40.860 So beyond the effectiveness,

612 00:29:40.860 --> 00:29:43.680 how do I know my intervention is effective?

613 00:29:43.680 --> 00:29:44.880 It's also focusing on

614 00:29:44.880 --> 00:29:46.950 how do I develop organizational support

615 00:29:46.950 --> 00:29:50.130 to deliver my intervention, the implementation,

616 00:29:50.130 --> 00:29:54.030 how do I ensure the intervention is delivered properly

617 00:29:54.030 --> 00:29:56.940 and that maintenance, how do I incorporate the intervention

618 00:29:56.940 --> 00:29:59.520 so it is delivered over the long term?

619 00:29:59.520 --> 00:30:02.340 And finally, how do I reach the targeted population?

620 00:30:02.340 --> 00:30:06.450 So re-aim is another framework in the field

621 00:30:06.450 --> 00:30:07.740 that was developed for the field

622 00:30:07.740 --> 00:30:11.670 and also has a website with extensive guidance

623 00:30:11.670 --> 00:30:15.330 on the use of this framework and measures.

624 00:30:15.330 --> 00:30:20.330 So on the next slide, I wanted to move now

625 00:30:20.670 --> 00:30:23.640 to what opportunities and priorities

626 00:30:23.640 --> 00:30:25.893 in implementation science at NCI.

627 00:30:27.000 --> 00:30:30.810 So first starting with the trans-NIH funding opportunities

628 00:30:30.810 --> 00:30:33.933 that NCI leads on the next slide.

629 00:30:35.010 --> 00:30:37.200 And so these are called the Dissemination

630 00:30:37.200 --> 00:30:40.020 and Implementation Research in Health,

631 00:30:40.020 --> 00:30:43.110 PAR, that's program announcement with review.

632 00:30:43.110 --> 00:30:46.470 So that R is that dedicated study section.

633 00:30:46.470 --> 00:30:48.720 If folks were here at the very beginning of the call

634 00:30:48.720 --> 00:30:52.080 when Melinda and I were talking about review committees.

635 00:30:52.080 --> 00:30:56.010 So applications submitted to these funding opportunities

636 00:30:56.010 --> 00:30:58.860 which do include 22 institute centers

637 00:30:58.860 --> 00:31:01.140 and offices across the NIH

638 00:31:01.140 --> 00:31:04.140 participate in these funding opportunities.

639 00:31:04.140 --> 00:31:07.050 I believe I can share with you that while they will,

640 00:31:07.050 --> 00:31:10.860 the current versions that are published expire in May, 2022,

641 00:31:10.860 --> 00:31:13.500 you can expect that those will be renewed.

642 00:31:13.500 --> 00:31:15.003 So those will continue.

643 00:31:16.290 --> 00:31:19.140 And to date, we've funded well over 300 grants

644 00:31:19.140 --> 00:31:22.890 across the NIH just in the last decade

645 00:31:22.890 --> 00:31:25.050 through these funding opportunities.

646 00:31:25.050 --> 00:31:27.420 And that review committee I mentioned,

647 00:31:27.420 --> 00:31:31.860 it used to be called DIRH, our Center for Scientific Review

648 00:31:31.860 --> 00:31:35.580 at the NIH recently went through a process

649 00:31:35.580 --> 00:31:37.740 of reviewing the study sections

650 00:31:37.740 --> 00:31:40.230 and coming up with new study sections

651 00:31:40.230 --> 00:31:43.260 or revising somewhat how the study sections are

652 00:31:43.260 --> 00:31:44.760 to stay up to date with the science.

653 00:31:44.760 --> 00:31:48.330 And this is a process CSR goes through periodically.

654 00:31:48.330 --> 00:31:52.050 So now DIRH has become SIHH,

655 00:31:52.050 --> 00:31:54.240 which stands for the Science of Implementation

656 00:31:54.240 --> 00:31:56.280 in Health and Healthcare.

657 00:31:56.280 --> 00:31:59.280 There are an additional four review committees

658 00:31:59.280 --> 00:32:02.880 that were newly created that have overlapping interest

659 00:32:02.880 --> 00:32:05.070 with implementation science,

660 00:32:05.070 --> 00:32:07.860 which basically means just additional expertise.

661 00:32:07.860 --> 00:32:11.340 So if you submit through these funding opportunities,

662 00:32:11.340 --> 00:32:13.770 but for some reason, it is not assigned to SIHH,

663 00:32:14.910 --> 00:32:16.800 there can be a few reasons why that might happen.

664 00:32:16.800 --> 00:32:17.760 Feel free to reach out to me

665 00:32:17.760 --> 00:32:19.760 and we can talk about that another time.

666 00:32:21.570 --> 00:32:25.560 But all of these committees should have the capacity

667 00:32:25.560 --> 00:32:27.720 to review implementation science grants.

668 00:32:27.720 --> 00:32:30.630 And just also as a side note, for those of you familiar

669 00:32:30.630 --> 00:32:33.930 with the review committee, SIHH is almost entirely

670 00:32:33.930 --> 00:32:37.380 the same members as DIRH, the chair is the same.

671 00:32:37.380 --> 00:32:40.323 So it has been a pretty seamless transition.

672 00:32:41.370 --> 00:32:46.140 On the next slide, for those of you unfamiliar

673 00:32:46.140 --> 00:32:49.110 with these funding opportunities, I did want to highlight

674 00:32:49.110 --> 00:32:51.210 what the purpose of these are,

675 00:32:51.210 --> 00:32:55.230 which is to support innovative approaches to identifying,

676 00:32:55.230 --> 00:32:57.810 understanding, and developing strategies

677 00:32:57.810 --> 00:33:01.950 for overcoming barriers to the adoption, adaptation,

678 00:33:01.950 --> 00:33:03.960 integration, scale-up, and sustainability

679 00:33:03.960 --> 00:33:06.210 of evidence-based interventions.

680 00:33:06.210 --> 00:33:08.220 And I had mentioned earlier

681 00:33:08.220 --> 00:33:10.080 also an interest in de-implementation.

682 00:33:10.080 --> 00:33:13.950 So conversely, as we recognize there's a benefit

683 00:33:13.950 --> 00:33:16.890 in understanding circumstances that create a need to stop

684 00:33:16.890 --> 00:33:20.220 or reduce the use of interventions that are ineffective,

685 00:33:20.220 --> 00:33:22.293 unproven, low value, or harmful.

686 00:33:23.190 --> 00:33:24.420 And these funding opportunities,

687 00:33:24.420 --> 00:33:27.210 in addition to studying those strategies to implement

688 00:33:27.210 --> 00:33:32.210 or de-implement, we also seek studies that advance methods

689 00:33:33.420 --> 00:33:35.613 in our field as well as measures.

690 00:33:36.930 --> 00:33:39.840 So on the next slide, I just wanted to give you

691 00:33:39.840 --> 00:33:41.820 some example research questions

692 00:33:41.820 --> 00:33:44.190 from the funding opportunities, but I do encourage you

693 00:33:44.190 --> 00:33:47.310 to take a look at these funding opportunities

694 00:33:47.310 --> 00:33:51.990 and take a look again after, at the end of February

695 00:33:51.990 --> 00:33:54.330 when we hope that they will be reissued.

696 00:33:54.330 --> 00:33:56.850 So you can see slightly updated version of these,

697 00:33:56.850 --> 00:34:01.260 but essentially, these are focused on understanding

698 00:34:01.260 --> 00:34:04.320 what factors influence the creation, packaging, transmission

699 00:34:04.320 --> 00:34:06.870 and reception of valid health research knowledge.

700 00:34:06.870 --> 00:34:09.660 That's the dissemination research questions

701 00:34:09.660 --> 00:34:13.230 as well as understanding how do we adapt our interventions

702 00:34:13.230 --> 00:34:16.650 to best fit within specific contexts or settings,

703 00:34:16.650 --> 00:34:20.370 what strategies best support uptake in sustainability,

704 00:34:20.370 --> 00:34:24.810 also strategies to ensure scale-up and sustainability.

705 00:34:24.810 --> 00:34:28.980 And then finally, that de-implementation question.

706 00:34:28.980 --> 00:34:32.730 So on the next slide I just wanted to very briefly mention

707 00:34:32.730 --> 00:34:36.183 that there are, on our website,

708 00:34:37.320 --> 00:34:38.760 which I'll show you at the end,

709 00:34:38.760 --> 00:34:42.480 we do have examples of sample grant applications

710 00:34:42.480 --> 00:34:45.210 that have been successfully funded through these.

711 00:34:45.210 --> 00:34:50.210 And this is one of the most popular websites on our website

712 00:34:53.760 --> 00:34:57.540 because it's nice, not only do you have the abstract

713 00:34:57.540 --> 00:34:59.340 which anyone can access in reporter,

714 00:34:59.340 --> 00:35:02.850 but we had about a dozen investigators

715 00:35:02.850 --> 00:35:06.060 generously agree to have their full application,

716 00:35:06.060 --> 00:35:08.520 the research strategy, and specific aims

717 00:35:08.520 --> 00:35:10.800 also made available publicly.

718 00:35:10.800 --> 00:35:13.350 So you can see here and on the next slide

719 00:35:13.350 --> 00:35:18.120 a range of sample grants that are available

720 00:35:18.120 --> 00:35:22.410 and that really are spanning a range of different topics

721 00:35:22.410 --> 00:35:26.073 from healthcare, public health, sustainability,

722 00:35:27.630 --> 00:35:32.630 de-implementation, both in global and domestic settings.

723 00:35:34.200 --> 00:35:37.380 So on the next slide, in terms of priorities,

724 00:35:37.380 --> 00:35:39.990 just generally, I would like to mention for those of you

725 00:35:39.990 --> 00:35:44.990 who aren't aware, well, NCI is the one institute at NIH

726 00:35:45.450 --> 00:35:49.200 that has a separate congressional line item since,

727 00:35:49.200 --> 00:35:54.120 and our director is a presidential appointee.

728 00:35:54.120 --> 00:35:57.540 And so because of that we do submit each year an annual plan

729 00:35:57.540 --> 00:36:00.930 and budget proposal to Congress that needs to be approved.

730 00:36:00.930 --> 00:36:05.930 And so for this fiscal year that just ended,

731 00:36:06.480 --> 00:36:10.140 implementation science was recognized as a key priority area

732 00:36:10.140 --> 00:36:11.493 by the NCI.

733 00:36:12.930 --> 00:36:14.970 And on the next slide, you can see,

734 00:36:14.970 --> 00:36:17.040 and I think this really launched interest

735 00:36:17.040 --> 00:36:21.720 across the divisions and centers within the NCI

736 00:36:21.720 --> 00:36:25.715 and so our NCI Center for Global Health,

737 00:36:25.715 --> 00:36:29.910 they recently hired a new director

738 00:36:29.910 --> 00:36:33.870 and released this new strategic plan for the next four years

739 00:36:33.870 --> 00:36:36.510 where implementation science was also highlighted

740 00:36:36.510 --> 00:36:38.103 as a key priority area.

741 00:36:39.000 --> 00:36:43.170 So on the next slide, I just wanted to mention this,

742 00:36:43.170 --> 00:36:47.280 this is a real opportunity as we are thinking across the NIH

743 00:36:47.280 --> 00:36:50.940 and NCI of the importance of addressing inequities.

744 00:36:50.940 --> 00:36:54.990 And here the simple graph from the WHO really highlights

745 00:36:54.990 --> 00:36:58.053 how those global inequities in cancer control.

746 00:36:59.070 --> 00:37:03.630 And so on the next slide you can see, oh,

747 00:37:03.630 --> 00:37:08.630 and so just as an aside, this was a systematic review

748 00:37:09.450 --> 00:37:12.330 not just in cancer but across a range of health issues

749 00:37:12.330 --> 00:37:16.500 focusing on studies that have been published

750 00:37:16.500 --> 00:37:19.200 on implementing health interventions in LMICs.

751 00:37:19.200 --> 00:37:21.510 And these weren't implementation studies necessarily,

752 00:37:21.510 --> 00:37:24.750 these were just all studies in literature

753 00:37:24.750 --> 00:37:28.440 where they were looking at health interventions in LMICs.

754 00:37:28.440 --> 00:37:31.890 And what was interesting about this review

755 00:37:31.890 --> 00:37:36.890 is that relatively few, painfully few, only 14 studies,

756 00:37:37.530 --> 00:37:39.750 if you look at that smallest circle at the bottom,

757 00:37:39.750 --> 00:37:42.750 actually measured implementation outcomes.

758 00:37:42.750 --> 00:37:46.390 So really we saw this as a huge missed opportunity

759 00:37:48.060 --> 00:37:51.390 to be studying implementation in the context

760 00:37:51.390 --> 00:37:53.373 of global cancer control.

761 00:37:54.420 --> 00:37:58.570 And so on the next slide you can see that

762 00:37:58.570 --> 00:38:00.870 the Center for Global Health

763 00:38:00.870 --> 00:38:04.110 has issued two funding opportunities.

764 00:38:04.110 --> 00:38:07.410 One is a Notice of Special Interest for Dissemination

765 00:38:07.410 --> 00:38:12.090 and Implementation Science in Low Resource Environments.

766 00:38:12.090 --> 00:38:17.090 And those are, NOSIs are Notices of Special Interests

767 00:38:18.390 --> 00:38:21.000 that are tied to an existing funding opportunity.

768 00:38:21.000 --> 00:38:23.610 So in this case, these are tied to those dissemination

769 00:38:23.610 --> 00:38:24.537 and implementation research

770 00:38:24.537 --> 00:38:26.373 and health program announcements.

771 00:38:27.540 --> 00:38:32.130 And then most recently, the Center for Global Health

772 00:38:32.130 --> 00:38:37.130 issued a UO1 Clinical Trial Optional, Implementation Science

773 00:38:38.130 --> 00:38:40.860 for Cancer Control in People Living with HIV

774 00:38:40.860 --> 00:38:43.410 in Low and Middle-Income Countries.

775 00:38:43.410 --> 00:38:46.083 So given that Center for Global Health,

776 00:38:46.920 --> 00:38:48.480 one of their main strategic goals

777 00:38:48.480 --> 00:38:52.350 is to advance implementation science and cancer control

778 00:38:52.350 --> 00:38:54.060 in Low and Middle-Income countries,

779 00:38:54.060 --> 00:38:57.690 I would stay tuned for additional funding opportunities

780 00:38:57.690 --> 00:38:58.683 that may come out.

781 00:39:00.330 --> 00:39:03.840 And I'm happy to talk about any of these as well.

782 00:39:03.840 --> 00:39:07.170 So on the next slide I wanted to mention

783 00:39:07.170 --> 00:39:10.800 in addition to global and global is a part of this,

784 00:39:10.800 --> 00:39:14.220 the NCI launched a consortium

785 00:39:14.220 --> 00:39:16.110 for cancer implementation science

786 00:39:16.110 --> 00:39:18.330 and I remember one of your colleagues,

787 00:39:18.330 --> 00:39:23.250 Steve Bernstein was at that initial launch meeting.

788 00:39:23.250 --> 00:39:26.280 And so this was a consortium of implementation scientists

789 00:39:26.280 --> 00:39:29.340 and cancer control researchers identifying

790 00:39:29.340 --> 00:39:34.340 key areas that the field could really advance

791 00:39:35.160 --> 00:39:38.490 and we could all benefit from advancing those areas.

792 00:39:38.490 --> 00:39:43.490 So you can see here the CCIS development of public goods

793 00:39:43.890 --> 00:39:46.740 on the bottom left of the slide.

794 00:39:46.740 --> 00:39:51.210 And on the next slide, you can see examples

795 00:39:51.210 --> 00:39:55.410 of what those different areas were.

796 00:39:55.410 --> 00:39:59.130 So one was focused on enhancing community participation

797 00:39:59.130 --> 00:40:02.220 and more broadly, stakeholder engagement.

798 00:40:02.220 --> 00:40:06.120 One is focused on advancing economic evaluation

799 00:40:06.120 --> 00:40:09.150 and really understanding not just the cost-effectiveness

800 00:40:09.150 --> 00:40:12.150 of the intervention but the cost of the strategies

801 00:40:12.150 --> 00:40:14.490 and how do we measure those costs.

802 00:40:14.490 --> 00:40:19.470 And there are relatively few good measures for that.

803 00:40:19.470 --> 00:40:23.010 In fact, none to date have been validated measures

804 00:40:23.010 --> 00:40:24.480 of implementation costs.

805 00:40:24.480 --> 00:40:28.560 So there's been a thriving community of economists,

806 00:40:28.560 --> 00:40:31.380 healthcare, health service researchers,

807 00:40:31.380 --> 00:40:33.270 and implementation scientists working together

808 00:40:33.270 --> 00:40:36.390 to try to develop guidance for the field on doing that.

809 00:40:36.390 --> 00:40:39.900 Also a focus on policy implementation science

810 00:40:39.900 --> 00:40:41.580 and context and equity.

811 00:40:41.580 --> 00:40:43.140 And as you can see in the small print,

812 00:40:43.140 --> 00:40:48.140 additional areas that were identified as key priorities

813 00:40:48.150 --> 00:40:50.730 where those public goods are forthcoming.

814 00:40:50.730 --> 00:40:53.160 So if you were to click on those pluses

815 00:40:53.160 --> 00:40:56.970 by each of those four areas I mentioned,

816 00:40:56.970 --> 00:41:00.150 on the next slide you can see for example

817 00:41:00.150 --> 00:41:04.860 with the economics and costs group, there is a link

818 00:41:04.860 --> 00:41:08.230 to a new collection of papers that was just published

819 00:41:09.180 --> 00:41:12.240 in BMC, and it's a collection

820 00:41:12.240 --> 00:41:14.190 because it's not only in one journal

821 00:41:14.190 --> 00:41:16.140 but it's across several BMC journals.

822 00:41:16.140 --> 00:41:17.400 So implementation science

823 00:41:17.400 --> 00:41:19.683 and implementation science communications.

824 00:41:20.880 --> 00:41:23.340 And these are a series of papers that are providing

825 00:41:23.340 --> 00:41:25.710 that guidance I had mentioned around measuring cost

826 00:41:25.710 --> 00:41:27.530 in implementation science.

827 00:41:27.530 --> 00:41:32.530 On the next slide you can see resources for stakeholder

828 00:41:33.060 --> 00:41:34.470 and community engagement.

829 00:41:34.470 --> 00:41:39.393 There's a whole list on the next,

830 00:41:41.040 --> 00:41:43.320 I think somebody is not on mute,

831 00:41:43.320 --> 00:41:44.463 but I'm almost done.

832 00:41:50.550 --> 00:41:51.693 The next slide.

833 00:41:53.017 --> 00:41:56.267 <v Donna>Gila, can you mute everybody?</v>

834 00:42:05.039 --> 00:42:09.933 <v ->Oh, I see Amaka joined who I know from Aortic.</v>

835 00:42:12.300 --> 00:42:16.140 So on the next slide, that community engagement

836 00:42:16.140 --> 00:42:19.473 and stakeholder engagement, if you go one more, William,

837 00:42:20.490 --> 00:42:25.490 you'll see that that group created this phenomenal resource

838 00:42:25.560 --> 00:42:29.520 on stakeholder, and community engagement literature,

839 00:42:29.520 --> 00:42:32.100 and best practices and measures of doing that.

840 00:42:32.100 --> 00:42:35.970 So on the next slide, you can see

841 00:42:35.970 --> 00:42:38.940 what are the contents of that resource.

842 00:42:38.940 --> 00:42:41.910 Key readings focused on health equity

843 00:42:41.910 --> 00:42:44.490 and community engagement in implementation science,

844 00:42:44.490 --> 00:42:45.960 the rationale for doing it,

845 00:42:45.960 --> 00:42:50.960 frameworks for doing it, and assessing, and measuring it.

846 00:42:51.210 --> 00:42:54.060 And so that's a really rich guide

847 00:42:54.060 --> 00:42:57.810 if you're interested in focusing on that aspect.

848 00:42:57.810 --> 00:42:59.373 On the next slide,

849 00:43:00.540 --> 00:43:03.240 this gets to the policy implementation science

850 00:43:03.240 --> 00:43:08.240 and I did see that there may be several of you

851 00:43:08.340 --> 00:43:09.870 or many of you who are really interested

852 00:43:09.870 --> 00:43:13.407 in advancing policy implementation science.

853 00:43:13.407 --> 00:43:15.820 And so there was this recent commentary

854 00:43:17.070 --> 00:43:19.680 addressing that in particular

855 00:43:19.680 --> 00:43:21.960 as a way to address social determinants of health.

856 00:43:21.960 --> 00:43:26.960 We also had Karen Emmonds from Harvard come and work with us

857 00:43:28.200 --> 00:43:31.380 over the last two years to really build out this area.

858 00:43:31.380 --> 00:43:33.540 And one of the things that she did

859 00:43:33.540 --> 00:43:37.800 was help curate this fantastic series of webinars.

860 00:43:37.800 --> 00:43:41.010 I think there were six in total, here are four of them,

861 00:43:41.010 --> 00:43:42.360 they've all been archived.

862 00:43:42.360 --> 00:43:47.360 So something that you may be interested in exploring.

863 00:43:48.840 --> 00:43:51.690 And so those are just some of the key priority areas

864 00:43:51.690 --> 00:43:54.060 that I wanted to mention.

865 00:43:54.060 --> 00:43:58.380 But then finally, where can you learn more?

866 00:43:58.380 --> 00:44:03.380 So on the next slide, and the next slide after that.

867 00:44:03.900 --> 00:44:06.660 So in addition to those policy webinars,

868 00:44:06.660 --> 00:44:09.210 we do have a whole host of webinars,

869 00:44:09.210 --> 00:44:10.620 two different webinar series.

870 00:44:10.620 --> 00:44:13.230 All of these webinars are archived.

871 00:44:13.230 --> 00:44:17.070 Some of those include, from years past,

872 00:44:17.070 --> 00:44:20.463 a focus on different methodologies, measurement,

873 00:44:22.140 --> 00:44:23.400 the use of frameworks.

874 00:44:23.400 --> 00:44:28.350 And upcoming our next webinar at the end of November

875 00:44:28.350 --> 00:44:30.600 is focused again on economic evaluation

876 00:44:30.600 --> 00:44:33.990 because of that recent publication of those collection

877 00:44:33.990 --> 00:44:36.060 of papers which continues to grow.

878 00:44:36.060 --> 00:44:39.480 Right now we have two published in that collection,

879 00:44:39.480 --> 00:44:43.453 two forthcoming any day now, and an additional six

880 00:44:44.580 --> 00:44:48.960 that are forthcoming in the coming months.

881 00:44:48.960 --> 00:44:51.990 And so in addition to the webinars, I did wanna mention

882 00:44:51.990 --> 00:44:55.200 for those of you new to implementation science

883 00:44:55.200 --> 00:44:57.150 and hopefully, I've convinced you

884 00:44:57.150 --> 00:45:00.600 that you may wanna learn more, on the next slide,

885 00:45:00.600 --> 00:45:05.240 you can see that NCI has been hosting a training institute

886 00:45:05.240 --> 00:45:07.233 in implementation science.

887 00:45:08.344 --> 00:45:09.990 And here you can see the main modules

888 00:45:09.990 --> 00:45:12.060 for this training institute.

889 00:45:12.060 --> 00:45:15.420 It historically had been an institute

890 00:45:15.420 --> 00:45:18.300 where initially was a residential program,

891 00:45:18.300 --> 00:45:20.940 five-day intensive residential program.

892 00:45:20.940 --> 00:45:23.310 Then we moved to a hybrid model

893 00:45:23.310 --> 00:45:26.340 where we would do three months online

894 00:45:26.340 --> 00:45:28.080 where people could just integrate it

895 00:45:28.080 --> 00:45:31.410 into their everyday lives but then a two-person

896 00:45:31.410 --> 00:45:32.760 in day meeting.

897 00:45:32.760 --> 00:45:35.640 And now with COVID, it's been completely virtual

898 00:45:35.640 --> 00:45:40.020 but also it has been a highly competitive program

899 00:45:40.020 --> 00:45:42.870 and we've wanted to be able to train more people

900 00:45:42.870 --> 00:45:46.590 than we can necessarily accommodate at our NCI offices.

901 00:45:46.590 --> 00:45:48.510 So we have made it open-access

902 00:45:48.510 --> 00:45:51.060 and all the modules now are available

903 00:45:51.060 --> 00:45:53.070 as well as the readings.

904 00:45:53.070 --> 00:45:56.520 The one thing that you don't get from the open-access

905 00:45:56.520 --> 00:46:00.040 and during those three months of the online

906 00:46:02.400 --> 00:46:07.380 you get feedback from faculty on your proposal.

907 00:46:07.380 --> 00:46:09.960 So it's really an opportunity to develop a proposal

908 00:46:09.960 --> 00:46:12.123 through this training program.

909 00:46:13.170 --> 00:46:17.427 But thankfully you have a whole team at NCI

910 00:46:17.427 --> 00:46:21.180 and program directors across the NCI and NIH

911 00:46:21.180 --> 00:46:23.820 who can help you as you're developing your proposal.

912 00:46:23.820 --> 00:46:27.900 So I would encourage you as you are developing proposals

913 00:46:27.900 --> 00:46:30.600 for implementation science or if you are

914 00:46:30.600 --> 00:46:32.070 and when you are to reach out

915 00:46:32.070 --> 00:46:35.010 to program staff often and early.

916 00:46:35.010 --> 00:46:38.190 So on the next slide, I did just wanna mention

917 00:46:38.190 --> 00:46:42.210 at least for NCI, on the next slide,

918 00:46:42.210 --> 00:46:46.800 we do have a pretty user-friendly search function

919 00:46:46.800 --> 00:46:50.880 where you can look through at the division of cancer control

920 00:46:50.880 --> 00:46:54.060 and population sciences grant opportunities,

921 00:46:54.060 --> 00:46:56.400 we have a filter where implementation science

922 00:46:56.400 --> 00:46:57.540 is one of those filters.

923 00:46:57.540 --> 00:47:00.930 So in addition to the funding opportunities I mentioned,

924 00:47:00.930 --> 00:47:05.100 you can see which other funding opportunities might exist

925 00:47:05.100 --> 00:47:07.410 that could align with the specific topics

926 00:47:07.410 --> 00:47:08.460 that you're focused on.

927 00:47:08.460 --> 00:47:09.660 We do have one for example,

928 00:47:09.660 --> 00:47:13.650 that's specifically on de-implementation in cancer screening

929 00:47:13.650 --> 00:47:15.243 for the overuse of screening.

930 00:47:16.320 --> 00:47:20.610 And lastly, on the last slide, I just wanted to leave you

931 00:47:20.610 --> 00:47:23.490 with a link to our team's website and to remind you

932 00:47:23.490 --> 00:47:28.490 that I am just one of a fantastic group of folks at the NCI

933 00:47:29.400 --> 00:47:31.110 on the implementation science team.

934 00:47:31.110 --> 00:47:36.110 You can see there in the back left is David Chambers,

935 00:47:36.353 --> 00:47:39.270 our director for implementation science,

936 00:47:39.270 --> 00:47:42.310 as well as Wynne Norton, April Oh, Cindy Vincent

937 00:47:43.260 --> 00:47:48.260 who are other critical members of our team.

938 00:47:48.990 --> 00:47:50.670 So thanks, I hope that was helpful.

939 00:47:50.670 --> 00:47:53.160 And I was hoping we'd have at least 10 minutes

940 00:47:53.160 --> 00:47:53.993 for questions.

941 00:47:53.993 --> 00:47:57.390 So I hope, Donna, we can use some of that time

942 00:47:57.390 --> 00:47:59.523 for questions if folks have questions.

943 00:48:02.730 --> 00:48:07.620 <v ->Yeah, so perfect timing</v>

944 00:48:07.620 --> 00:48:11.610 and it's great to see the overview

945 00:48:11.610 --> 00:48:14.640 and it's so interesting that some of the slides

946 00:48:14.640 --> 00:48:17.580 that you have shown, I also show in my class

947 00:48:17.580 --> 00:48:19.020 and I'm guessing Luke Davis

948 00:48:19.020 --> 00:48:22.590 who teaches our implementation science course here

949 00:48:22.590 --> 00:48:24.300 probably uses some of these slides.

950 00:48:24.300 --> 00:48:26.280 So there's so much common knowledge

951 00:48:26.280 --> 00:48:29.340 and kind of perspective that I think we all share.

952 00:48:29.340 --> 00:48:31.410 I see that Luke Davis has his hand up.

953 00:48:31.410 --> 00:48:35.910 He is an implementation scientist focusing primarily

954 00:48:35.910 --> 00:48:38.670 on HIV and tuberculosis,

955 00:48:38.670 --> 00:48:41.190 particularly from the global health perspective.

956 00:48:41.190 --> 00:48:44.880 And he's an associate faculty member of our center.

957 00:48:44.880 --> 00:48:48.960 So Luke, what are your questions and comments?

958 00:48:48.960 --> 00:48:51.720 <v ->Thank you, Donna, and thank you Gila for a great talk.</v>

959 00:48:51.720 --> 00:48:54.420 Donna's right, I really do enjoy your slides

960 00:48:54.420 --> 00:48:56.100 and a lot of the materials that you, and David,

961 00:48:56.100 --> 00:48:57.960 and others have put together, they've been very helpful

962 00:48:57.960 --> 00:49:00.420 in setting up our implementation science course

963 00:49:00.420 --> 00:49:02.040 here at Yale.

964 00:49:02.040 --> 00:49:02.873 As Donna mentioned,

965 00:49:02.873 --> 00:49:04.320 I'm primarily a global health researcher,

966 00:49:04.320 --> 00:49:06.060 but I wanted to ask you a general question

967 00:49:06.060 --> 00:49:08.280 about grant strategy 'cause this is something

968 00:49:08.280 --> 00:49:09.420 that's come up in my own work

969 00:49:09.420 --> 00:49:12.120 and also in talking with other colleagues here at Yale

970 00:49:12.120 --> 00:49:13.980 who are interested in putting in proposals

971 00:49:13.980 --> 00:49:17.280 and I think the issue that arises

972 00:49:17.280 --> 00:49:19.890 is that often one of the most common critiques, I think,

973 00:49:19.890 --> 00:49:22.440 of any type of grant is that there's an interdependence

974 00:49:22.440 --> 00:49:24.450 of the aims and in implementation science,

975 00:49:24.450 --> 00:49:25.950 I think it's very common

976 00:49:25.950 --> 00:49:28.170 that you may be thinking of adapting

977 00:49:28.170 --> 00:49:31.710 or scaling-up intervention or an implementation strategy

978 00:49:31.710 --> 00:49:32.970 in a new setting

979 00:49:32.970 --> 00:49:37.230 and you don't yet have the intervention adapted.

980 00:49:37.230 --> 00:49:39.570 And so often maybe aim one might be to adapt it

981 00:49:39.570 --> 00:49:41.490 and aim two might be to evaluate it.

982 00:49:41.490 --> 00:49:43.350 And that leads commonly to a critique

983 00:49:43.350 --> 00:49:45.270 that the two aims are interdependent.

984 00:49:45.270 --> 00:49:47.880 And I'm just curious how you would respond to that

985 00:49:47.880 --> 00:49:49.650 from an implementation science perspective.

986 00:49:49.650 --> 00:49:52.380 And then more practically when you're in that type

987 00:49:52.380 --> 00:49:55.440 of situation, are you better off, say, pursuing an R21

988 00:49:55.440 --> 00:49:58.980 and doing the adaptation in one grant,

989 00:49:58.980 --> 00:50:01.290 and then pursuing the evaluation in another.

990 00:50:01.290 --> 00:50:02.123 Thanks so much.

991 00:50:02.123 --> 00:50:04.020 Really enjoyed your talk.

992 00:50:04.020 --> 00:50:06.510 <v ->Very important question, Luke.</v>

993 00:50:06.510 --> 00:50:07.920 <v ->Yes, excellent question</v>

994 00:50:07.920 --> 00:50:10.680 and not the first time I've been asked.

995 00:50:10.680 --> 00:50:12.960 Yeah, no, it's a great question.

996 00:50:12.960 --> 00:50:14.223 I guess the first thing,

997 00:50:15.120 --> 00:50:17.970 well, there's several first reactions I have to that

998 00:50:17.970 --> 00:50:22.970 and one is, I think that one of the struggles is making sure

999 00:50:24.450 --> 00:50:28.650 for each aim they have to have their own hypothesis.

1000 00:50:28.650 --> 00:50:30.660 They are each individual scientific aim.

1001 00:50:30.660 --> 00:50:33.780 So is it enough to just say you wanna adapt

1002 00:50:33.780 --> 00:50:35.400 the intervention in your aim?

1003 00:50:35.400 --> 00:50:37.380 I think part of it is understanding

1004 00:50:37.380 --> 00:50:38.910 what are the most effective ways

1005 00:50:38.910 --> 00:50:41.640 and you may hypothesize an effective way to adapt it.

1006 00:50:41.640 --> 00:50:44.050 So the use of different methods to do that

1007 00:50:44.940 --> 00:50:46.590 I think could be the focus.

1008 00:50:46.590 --> 00:50:51.590 But I think what we've seen more in terms of the challenge

1009 00:50:51.810 --> 00:50:55.320 of that interdependence has been where the first aim

1010 00:50:55.320 --> 00:50:57.120 is trying to understand the barriers

1011 00:50:58.410 --> 00:51:02.130 and you don't know then whether those barriers will be ones

1012 00:51:02.130 --> 00:51:04.020 that can be overcome for example,

1013 00:51:04.020 --> 00:51:07.140 or how that would influence your strategy.

1014 00:51:07.140 --> 00:51:10.650 So I think we often encourage investigators

1015 00:51:10.650 --> 00:51:13.110 to already have a clear sense

1016 00:51:13.110 --> 00:51:15.750 or already have a reasonably clear sense

1017 00:51:15.750 --> 00:51:18.480 of what the likely barriers might be.

1018 00:51:18.480 --> 00:51:21.180 But also given that implementation sciences really focused

1019 00:51:21.180 --> 00:51:22.560 on understanding context,

1020 00:51:22.560 --> 00:51:26.520 we understand that that's also a significant aspect

1021 00:51:26.520 --> 00:51:28.470 of the study.

1022 00:51:28.470 --> 00:51:33.330 So I think, if you go through those sample grants,

1023 00:51:33.330 --> 00:51:37.710 you'll see that, I think this is a nuanced challenge

1024 00:51:37.710 --> 00:51:41.040 because many of our grants that aim one, it does have to do

1025 00:51:41.040 --> 00:51:44.040 with adaptation or understanding barriers and context.

1026 00:51:44.040 --> 00:51:47.160 And I think part of it is how it is framed,

1027 00:51:47.160 --> 00:51:52.020 and how you can justify that this is needed,

1028 00:51:52.020 --> 00:51:56.070 and it will not, I think it's needed

1029 00:51:56.070 --> 00:52:00.600 because it's needed to make sure that you're tailoring

1030 00:52:00.600 --> 00:52:04.140 those strategies, that they are attentive.

1031 00:52:04.140 --> 00:52:06.090 But it's true that the more

1032 00:52:06.090 --> 00:52:10.290 you can have some preliminary evidence on the feasibility

1033 00:52:10.290 --> 00:52:13.080 and acceptability of those strategies,

1034 00:52:13.080 --> 00:52:15.480 and some preliminary evidence on those barriers

1035 00:52:15.480 --> 00:52:16.313 would be critical.

1036 00:52:16.313 --> 00:52:18.000 And I think that gets to your second question

1037 00:52:18.000 --> 00:52:21.960 of whether you go for the R21 or the R01.

1038 00:52:21.960 --> 00:52:25.080 I can't tell you how much preliminary evidence you need.

1039 00:52:25.080 --> 00:52:26.343 That is a tough one.

1040 00:52:27.240 --> 00:52:29.670 The answer is always, it depends,

1041 00:52:29.670 --> 00:52:31.800 but I think for a particular study,

1042 00:52:31.800 --> 00:52:33.780 and I think that those are the conversations

1043 00:52:33.780 --> 00:52:36.450 that presumably program directors,

1044 00:52:36.450 --> 00:52:40.500 program officers can help you figure out

1045 00:52:40.500 --> 00:52:42.903 as you're developing those aims pages.

1046 00:52:46.950 --> 00:52:48.093 <v Donna>Great.</v>

1047 00:52:48.093 --> 00:52:48.926 <v ->I hope that's helpful.</v>

1048 00:52:48.926 --> 00:52:50.072 Yeah, glad to talk more about that offline.

1049 00:52:50.072 --> 00:52:50.905 <v Luke>Yeah.</v>

1050 00:52:50.905 --> 00:52:51.738 Great.

1051 00:52:51.738 --> 00:52:52.571 Thank you.

1052 00:52:52.571 --> 00:52:56.170 <v ->Does anybody else in our audience have a question</v>

1053 00:52:57.330 --> 00:52:58.893 or comment they'd like to make?

1054 00:53:01.380 --> 00:53:04.743 Okay, well, Gila, I was wondering,

1055 00:53:05.589 --> 00:53:08.970 I'm kind of interested and I keep encouraging colleagues

1056 00:53:08.970 --> 00:53:13.440 that I work with to think about integrated approaches

1057 00:53:13.440 --> 00:53:17.370 to health promotion that might, let's say for example,

1058 00:53:17.370 --> 00:53:21.240 there's the PEN guidelines from WHO

1059 00:53:21.240 --> 00:53:24.000 for chronic disease prevention and control.

1060 00:53:24.000 --> 00:53:26.820 And it addresses the controllable cancers,

1061 00:53:26.820 --> 00:53:30.060 it addresses cardiometabolic diseases,

1062 00:53:30.060 --> 00:53:34.140 and I think it includes mental health disorders that have,

1063 00:53:34.140 --> 00:53:37.890 all of which have well-known evidence-based interventions

1064 00:53:37.890 --> 00:53:40.920 that probably need to be adapted to different contexts.

1065 00:53:40.920 --> 00:53:42.480 By the way, I should mention,

1066 00:53:42.480 --> 00:53:45.090 we do have quite a bit of global reach in our center

1067 00:53:45.090 --> 00:53:49.200 and there's people on this call from, at least from Nigeria

1068 00:53:49.200 --> 00:53:52.110 I can see, and also from Mexico.

1069 00:53:52.110 --> 00:53:55.950 So anyway, but then we have the problem with NIH

1070 00:53:55.950 --> 00:53:59.130 that a proposal has to be cancer

1071 00:53:59.130 --> 00:54:00.810 or it has to be mental health

1072 00:54:00.810 --> 00:54:03.720 or it has to be cardiovascular disease

1073 00:54:03.720 --> 00:54:06.840 when really probably the most sustainable,

1074 00:54:06.840 --> 00:54:08.970 when once somebody's in a center

1075 00:54:08.970 --> 00:54:10.350 or once a community health worker

1076 00:54:10.350 --> 00:54:12.150 is going to somebody's home,

1077 00:54:12.150 --> 00:54:16.290 why would they only focus on HPV vaccination

1078 00:54:16.290 --> 00:54:18.510 or taking a TB test,

1079 00:54:18.510 --> 00:54:21.420 it just isn't really the best thing for public health.

1080 00:54:21.420 --> 00:54:23.970 And how do you suggest that we address that

1081 00:54:23.970 --> 00:54:26.880 in terms of developing interventions

1082 00:54:26.880 --> 00:54:29.253 that are really integrated?

1083 00:54:30.510 --> 00:54:33.063 <v ->That's a visionary question.</v>

1084 00:54:34.348 --> 00:54:37.260 I think it's the next horizon and I can say,

1085 00:54:37.260 --> 00:54:38.430 I know this is an area

1086 00:54:38.430 --> 00:54:41.610 that David Chambers has been really pushing this concept of

1087 00:54:41.610 --> 00:54:44.460 how do we best bundle our margins?

1088 00:54:44.460 --> 00:54:45.960 And I think that's really critical,

1089 00:54:45.960 --> 00:54:50.960 especially, in global contexts, but oh yeah,

1090 00:54:51.480 --> 00:54:56.407 and I see that perhaps some of your tighter alum

1091 00:54:58.470 --> 00:55:00.990 can speak to that as well.

1092 00:55:00.990 --> 00:55:04.320 But no, I think absolutely that is really critical

1093 00:55:04.320 --> 00:55:05.730 and I think that is an area

1094 00:55:05.730 --> 00:55:09.720 that we are hoping to see advance.

1095 00:55:09.720 --> 00:55:12.510 <v ->But right now it isn't really an option.</v>

1096 00:55:12.510 --> 00:55:14.220 Do you agree?

1097 00:55:14.220 --> 00:55:18.420 For example, I'm a methodologist, so I work in cancer,

1098 00:55:18.420 --> 00:55:21.630 but I also work on HIV AIDS, and other areas,

1099 00:55:21.630 --> 00:55:24.570 and we're involved in implementation science work

1100 00:55:24.570 --> 00:55:27.390 in ending the AIDS epidemic domestically.

1101 00:55:27.390 --> 00:55:31.020 And we have a core, a technical support core,

1102 00:55:31.020 --> 00:55:34.140 for implementation science methods across the range

1103 00:55:34.140 --> 00:55:36.870 of qualitative, quantitative, and health economics.

1104 00:55:36.870 --> 00:55:40.560 Anyway, when we had our renewal, they wanted an innovation.

1105 00:55:40.560 --> 00:55:44.850 And so I suggested maybe thinking about integration

1106 00:55:44.850 --> 00:55:49.850 of HIV prevention and control with say some other issues

1107 00:55:51.900 --> 00:55:52.950 that people are facing.

1108 00:55:52.950 --> 00:55:57.780 And so because this particular core, and overall project,

1109 00:55:57.780 --> 00:56:01.530 and consortium is funded by NIMH and NIAD,

1110 00:56:01.530 --> 00:56:04.860 they said we could only integrate with substance abuse

1111 00:56:04.860 --> 00:56:05.883 and mental health.

1112 00:56:06.840 --> 00:56:07.673 <v ->Well, actually-</v>

1113 00:56:07.673 --> 00:56:11.490 <v ->Not in diabetes or obesity or cancer screening,</v>

1114 00:56:11.490 --> 00:56:13.680 that was like off the table.

1115 00:56:13.680 --> 00:56:15.540 <v ->Well, that is one challenge</v>

1116 00:56:15.540 --> 00:56:18.120 sometimes people bring up depending on the institute.

1117 00:56:18.120 --> 00:56:21.210 But you said the Center for Global Health

1118 00:56:21.210 --> 00:56:23.640 recently released as you know the U01

1119 00:56:23.640 --> 00:56:25.200 that's focused on cancer control

1120 00:56:25.200 --> 00:56:26.940 and populations living with HIV.

1121 00:56:26.940 --> 00:56:31.260 And so there, I think that opportunity,

1122 00:56:31.260 --> 00:56:35.370 that funding announcement, I think bundling is identified

1123 00:56:35.370 --> 00:56:37.380 as one of the key questions there

1124 00:56:37.380 --> 00:56:40.230 and how do you integrate it with HIV care,

1125 00:56:40.230 --> 00:56:42.751 how can you cancer control of HIV care.

1126 00:56:42.751 --> 00:56:46.770 <v ->Yeah.</v>

1127 00:56:46.770 --> 00:56:47.603 Great.

1128 00:56:49.740 --> 00:56:52.590 So any other comments?

1129 00:56:52.590 --> 00:56:54.873 We're a minute away from the hour.

1130 00:56:57.330 --> 00:56:58.163 Okay.

1131 00:56:58.163 --> 00:57:00.810 Well, thank you all for tuning in

1132 00:57:00.810 --> 00:57:04.800 and continuing with your work in implementation science

1133 00:57:04.800 --> 00:57:06.120 here at Yale and elsewhere.

1134 00:57:06.120 --> 00:57:09.360 And thank you, Dr. Neta, for such an interesting

1135 00:57:09.360 --> 00:57:11.220 and informative talk.

1136 00:57:11.220 --> 00:57:13.830 So have a great rest of your day everybody.

1137 00:57:13.830 --> 00:57:14.880 <v ->Thank you for inviting me</v>

1138 00:57:14.880 --> 00:57:16.133 and thank you to William for advancing my slides.

1139 00:57:16.133 --> 00:57:17.216 <v Luke>Bye.</v>

1140 00:57:18.554 --> 00:57:19.908 <v Donna>Bye-bye.</v>

1141 00:57:19.908 --> 00:57:20.970 <v Gila>Thanks, bye.</v>