WEBVTT

 $1\ 00:00:00.000 \longrightarrow 00:00:03.250$ (attendees chattering)

 $2\ 00:00:14.974 \longrightarrow 00:00:19.057$ (attendees chattering continues)

3 00:00:22.566 --> 00:00:25.483 <v ->Thanks.</v> <v ->Thank you for your help.</v>

4 00:00:28.340 --> 00:00:30.606 <v Donna>Hey, Ericka, how are you?</v>

5 00:00:30.606 --> 00:00:33.206 <v ->Good, how are you?</v> <v ->Good, thank you.</v>

6 00:00:33.206 --> 00:00:34.937 <v ->Hey-</v> <v ->So you must be Vilma?</v>

7 00:00:34.937 --> 00:00:36.840 <v ->Yes, I'm Vilma.</v>

 $8\ 00:00:36.840 \longrightarrow 00:00:37.860$ my name is Luke Davis.

9 00:00:37.860 --> 00:00:40.788 Nice to meet you. (laughs) <v ->Hello, Spanish... (laughs)</v>

10 00:00:40.788 --> 00:00:42.903 <v ->Yeah, I just came to welcome you.</v>

 $11\ 00:00:44.046$ --> 00:00:47.560 So I know trying set up with your presentation,

12 00:00:47.560 --> 00:00:49.726 but I would wanna have a chance to join you and Donna

 $13\ 00:00:49.726 \longrightarrow 00:00:51.309$ for dinner tonight?

14 00:00:52.173 --> 00:00:53.114 < v -> Oh, but not today.< /v >

 $15\ 00:00:53.114 \longrightarrow 00:00:56.339$ I'm so late, so we can't have that now.

16 00:00:56.339 --> 00:00:58.033 <v ->I'd love to hear more-</v> <v ->We're working on many,</v>

 $17\ 00:00:58.033 \rightarrow 00:00:59.749$ many things. $<v \rightarrow I'd$ love to hear more, </v >

 $18\ 00:00:59.749 \longrightarrow 00:01:01.173$ and of course I'll learn a lot now,

19 00:01:01.173 --> 00:01:02.368 and I know you're doing a lot of education-

20 00:01:02.368 --> 00:01:03.376 <v ->Well, you know...</v> <v ->I just wanna...</v>

21 00:01:03.376 --> 00:01:04.818 <v Vilma>Yeah, that's good.</v>

22 00:01:04.818 --> 00:01:06.528 Some other time. <v ->Well, remember,</v>

23 00:01:06.528 --> 00:01:08.557 it's my treat.

->Okay, thanks very much.
/v>

24 00:01:08.557 --> 00:01:09.390 I really appreciate. $<\!\!\mathrm{v}$ ->We're ready to turn,</v>

25 00:01:09.390 --> 00:01:11.790 so if you wanna go to the podium and choose-26 00:01:11.790 --> 00:01:12.660 <v ->Oh, I see.</v> <v ->You have to do it</v>

27 00:01:12.660 --> 00:01:14.604 at the podium, yeah. (laughs) (Vilma laughing) 28 00:01:14.604 --> 00:01:16.754 <v Vilma>All right, I'll go to the podium then. (laughs)</v>

29 00:01:16.754 --> 00:01:21.754 <v ->Oh, okay. (Vilma laughing)</v>

30 00:01:23.834 --> 00:01:26.084 <v ->So are you ready?</v> <v ->Yeah.</v>

31 00:01:27.667 --> 00:01:28.500 <v Donna>It's only 12:01.</v>

 $32\ 00:01:28.500 \longrightarrow 00:01:30.139$ We usually give people a little more time

34 00:01:36.270 --> 00:01:38.770 <v ->Yeah, we usually do.</v> <v ->Okay.</v>

35 00:01:40.528 --> 00:01:41.361 <v Donna>Hmm...</v>

 $36\ 00:01:41.361 \longrightarrow 00:01:44.194$ (papers rustling)

 $37\ 00:01:46.552 \longrightarrow 00:01:47.718$ Do you want me to put it in the chat

 $38\ 00:01:47.718 \longrightarrow 00:01:50.319$ that we'll start in about five minutes?

 $39\ 00:01:50.319 \longrightarrow 00:01:51.777 < v Ericka>I can be do that now.</v>$

40 00:01:51.777 --> 00:01:54.126 <v Donna>Can they hear us right now?</v>

41 00:01:54.126 --> 00:01:55.958 <v Ericka>Yeah, we're not muted.</v>

42 00:01:55.958 --> 00:01:57.060 <v ->Okay, yeah, so hi, everyone.</v>

43 00:01:57.060 --> 00:02:00.227 We're just gonna give people a few more minutes to arrive.

44 00:04:51.570 --> 00:04:53.310 Hi, everyone, I'm Donna Spiegelman.

45 $00{:}04{:}53{.}310 \dashrightarrow 00{:}04{:}55{.}230$ I'm Director of the Center for Methods

46 00:04:55.230 --> 00:04:57.690 in Implementation and Prevention Science,

47 00:04:57.690 --> 00:05:01.290 and I'm very pleased today to introduce our speaker,

48 00:05:01.290 --> 00:05:04.350 Vilma Irazola, who is the Director

49 $00{:}05{:}04.350 \dashrightarrow 00{:}05{:}06.660$ of the South American Center of Excellence

5000:05:06.660 $\operatorname{-->}$ 00:05:09.930 for Cardiova
scular Health and the Institute

51 00:05:09.930 --> 00:05:12.150 for Clinical Effectiveness and Health Policy,

 $52\ 00:05:12.150 \longrightarrow 00:05:14.940$ both in Buenos Aires, Argentina.

53 00:05:14.940 --> 00:05:16.470 She's also deputy director

54 00:05:16.470 --> 00:05:19.770 of the master's degree program in Clinical Effectiveness

 $55\ 00:05:19.770 \longrightarrow 00:05:22.560$ at the University of Buenos Aires.

 $56\ 00:05:22.560 \longrightarrow 00:05:25.200$ She'll be speaking on, "Implementation Science:

57 00:05:25.200 --> 00:05:28.410 Lessons learned from low- and middle-income countries

58 00:05:28.410 --> 00:05:30.090 and new challenges."

59 00:05:30.090 --> 00:05:31.710 And I'm very pleased that this seminar

60 00:05:31.710 --> 00:05:34.980 is co-sponsored by Yale School of Public Health's

61 00:05:34.980 --> 00:05:37.920 Department of Chronic Disease Epidemiology,

 $62\ 00{:}05{:}37{.}920$ --> $00{:}05{:}40{.}980$ and by the Yale Institute for Global Health

 $63\ 00:05:40.980 \longrightarrow 00:05:42.660$ at the Yale School of Medicine,

 $64\ 00:05:42.660 \longrightarrow 00:05:44.640$ and by Cardiovascular Medicine

65 00:05:44.640 --> 00:05:46.020 at the Yale School of Medicine

66 00:05:46.020 --> 00:05:50.160 and finally, by our NIH T32 Training Grant

67 00:05:50.160 --> 00:05:53.643 in Implementation Science Research Methods from NHLBI.

 $68 \ 00:05:56.850 \longrightarrow 00:05:59.943$ Vilma is a cardiologist and epidemiologist.

69 00:06:01.410 --> 00:06:04.070 Her research is focused on implementation science

 $70\ 00:06:04.070$ --> 00:06:06.930 in the area of public health, health promotion

71 00:06:06.930 --> 00:06:10.020 and prevention and management of chronic diseases.

 $72\ 00{:}06{:}10.020$ --> $00{:}06{:}12.780$ She has been involved in the design and evaluation

 $73\ 00:06:12.780 \longrightarrow 00:06:15.720$ of community-based and primary care programs

 $74~00{:}06{:}15{.}720 \dashrightarrow 00{:}06{:}18{.}930$ and interventions related to cardiov ascular disease,

75 00:06:18.930 --> 00:06:20.493 diabetes and aging.

76 00:06:21.360 --> 00:06:23.490 In addition to her work in Argentina,

77 00:06:23.490 --> 00:06:24.540 where she also teaches

78 00:06:24.540 --> 00:06:27.630 Advanced Epidemiologic and Analytic Methods,

79 00:06:27.630 --> 00:06:32.550 she is Associate Professor of the Cross-Continental MPH

 $80\ 00:06:32.550 \longrightarrow 00:06:35.550$ at the College of Global Public Health at NYU,

 $81\ 00:06:35.550 \longrightarrow 00:06:36.840$ and a scholar and lecturer

8200:06:36.840 $\operatorname{-->}$ 00:06:38.790 at the Harvard School of Public Health.

83 00:06:38.790 --> 00:06:41.307 I've known Vilma, I don't know, for how many years?

84 00:06:41.307 $\rightarrow 00:06:43.500$ 15, 20, maybe more.

85 00:06:43.500 --> 00:06:45.780 We originally met at Harvard

86 00:06:45.780 --> 00:06:48.000 in connection with the Lown Scholars Program,

 $87~00{:}06{:}48.000$ --> $00{:}06{:}51.120$ among other things, and I think the last time I saw her

88 00:06:51.120 --> 00:06:53.580 was in Guatemala before COVID,

89 00:06:53.580 --> 00:06:57.900 where we were both working in a consortium of projects

90 00:06:57.900 --> 00:07:02.900 to scale up and implement cardiova
scular disease prevention,

91 00:07:03.900 --> 00:07:06.900 screening and treatment programs around the world,

 $92\ 00:07:06.900 \rightarrow 00:07:11.520$ a consortium that was sponsored by NHLBI.

93 00:07:11.520 --> 00:07:13.530 So I'm happy to turn things over to Vilma,

94 00:07:13.530 --> 00:07:16.860 and I'm looking forward to your talk.

95 00:07:16.860 --> 00:07:18.143 <v ->Thank you.</v>

96 00:07:18.143 --> 00:07:20.321 Thank you, thank you very much, Donna.

97 00:07:20.321 --> 00:07:22.362 And thank you for invitation

 $98\ 00:07:22.362 \longrightarrow 00:07:25.930$ and for this opportunity to share some topics

 $99\ 00:07:27.120 \longrightarrow 00:07:30.400$ that we are working on and to listen to you

 $100\ 00:07:30.400 \longrightarrow 00:07:33.600$ and your experiences as well.

101 00:07:33.600 --> 00:07:35.070 So for today,

102 00:07:35.070 --> 00:07:39.570 I will share a brief presentation

103 00:07:39.570 --> 00:07:44.010 about some topics that I'd like to share with you today,

 $104\ 00:07:44.010 \longrightarrow 00:07:47.317$ and I will share my screen in a minute.

 $105 \ 00:07:51.838 \longrightarrow 00:07:53.171$ Oh, there it is.

 $106\ 00:08:05.101 \longrightarrow 00:08:10.101$ Okay, so what's the idea today?

 $107\ 00:08:11.340 \longrightarrow 00:08:12.570$ What's the topic?

108 00:08:12.570 --> 00:08:14.610 This morning actually, Donna and I

 $109\ 00:08:14.610 \longrightarrow 00:08:17.400$ were talking about some aspects

 $110\ 00{:}08{:}17.400 \dashrightarrow 00{:}08{:}21.720$ that are so relevant for our work in implementation science,

111 00:08:21.720 --> 00:08:26.720 and about which we don't have, still,

 $112\ 00:08:27.630 \longrightarrow 00:08:29.760$ maybe all the methods and tools

 $113\ 00:08:29.760 \longrightarrow 00:08:33.360$ that we may need to approach that.

 $114\ 00:08:33.360 \longrightarrow 00:08:35.220$ So the idea is, today,

115 $00:08:35.220 \rightarrow 00:08:37.407$ to talk about the role of the control group

116 $00:08:37.407 \rightarrow 00:08:39.780$ and how to evaluate the control group

117 00:08:39.780 --> 00:08:43.590 in our implementation science studies,

 $118\ 00:08:43.590 \longrightarrow 00:08:47.640$ the role of context evaluation in this approach

119 $00{:}08{:}47.640$ --> $00{:}08{:}50.290$ and the concept of usual care and enhanced usual care

 $120\ 00:08:52.582 \longrightarrow 00:08:53.613$ in our project.

121 00:08:54.750 --> 00:08:59.750 To do this, I will use two examples from our work

 $122\ 00:09:00.900$ --> 00:09:05.370 in Argentina connected with hypertension control.

123 00:09:05.370 --> 00:09:08.970 These are two cluster-randomized controlled trials

 $124\ 00:09:08.970 \longrightarrow 00:09:12.930$ that we have conducted.

125 00:09:12.930 --> 00:09:17.930 One of them is finished and the other one is ongoing.

126 00:09:21.690 --> 00:09:24.660 Well, in terms of context evaluation,

127 00:09:24.660 --> 00:09:28.020 we all are familiar with the different frameworks

 $128\ 00:09:28.020 \longrightarrow 00:09:31.985$ that we usually use to approach this topic,

129 00:09:31.985 --> 00:09:33.843 like CFIR, for example,

130 00:09:34.890 --> 00:09:39.183 which is one of the first ones that approach, in depth,

131 $00:09:40.530 \rightarrow 00:09:45.093$ the evaluation of outer and inner settings.

 $132\ 00:09:46.530 \longrightarrow 00:09:49.050$ I am sure you are also familiar

133 00:09:49.050 --> 00:09:51.930 with the RE-AIM-PRISM framework, you know,

134 00:09:51.930 --> 00:09:56.723 that Dr. Glasgow, who is the developer of the framework,

135 00:10:03.570 --> 00:10:08.570 I'd say expanded this framework into REAIM-PRISM

136 00:10:14.128 --> 00:10:18.743 to include more aspects related to the context evaluation

 $137\ 00:10:20.430 \longrightarrow 00:10:22.440$ for this framework,

 $138\ 00:10:22.440 \longrightarrow 00:10:24.993$ which in the past was more focused

139 00:10:24.993 --> 00:10:29.993 only on evaluation and the different aspects of evaluation,

140 00:10:30.510 --> 00:10:32.670 in terms of reach, effectiveness,

141 00:10:32.670 --> 00:10:35.013 adoption, implementation among many.

142 00:10:35.940 --> 00:10:39.583 With RE-AIM-PRISM. we working today several projects

143 00:10:39.583 --> 00:10:42.833 in Argentina and Brazil and Guatemala,

 $144\ 00:10:44.790 \longrightarrow 00:10:47.070$ and we find it really useful

145 00:10:47.070 $\rightarrow 00:10:49.710$ for all these other topics that were added

146 00:10:49.710 --> 00:10:51.690 to the original RE-AIM framework.

147 00:10:52.987 --> 00:10:56.427 And also, I'd like to share with you this framework,

148 00:10:57.369 --> 00:10:59.573 which is the CIIP.

 $149\ 00:10:59.573 \longrightarrow 00:11:03.156$ This is a framework that, as far as I know,

150 00:11:04.228 --> 00:11:08.330 is not very commonly used in implementation research,

151 00:11:08.330 --> 00:11:11.127 it is more commonly used in training,

 $152\ 00:11:11.127 \longrightarrow 00:11:14.507$ in training projects and programs.

153 00:11:14.507 --> 00:11:17.997 And I think that there are several things in this framework

154 00:11:17.997 --> 00:11:21.920 that may be useful for us, as implementation researchers,

 $155\ 00:11:21.920 \rightarrow 00:11:25.503$ to adopt and to incorporate to our methods.

156 00:11:26.613 --> 00:11:31.196 And one thing that I find really interesting about CIIP

 $157\ 00:11:32.964 \longrightarrow 00:11:35.480$ is that the context evaluation,

 $158\ 00:11:35.480 \longrightarrow 00:11:39.001$ which is the first step in this framework,

 $159\ 00:11:39.001 \longrightarrow 00:11:43.376$ is then translated into the different stages

160 00:11:43.376 --> 00:11:44.509 in the framework.

161 00:11:44.509 --> 00:11:47.209 So according to this framework,

162 00:11:47.209 --> 00:11:51.509 we keep evaluating the context throughout the project.

163 00:11:51.509 $\rightarrow 00:11:55.433$ In this case, they are usually education

 $164\ 00:11:55.433 \longrightarrow 00:11:59.016$ or training projects, but the proposal here

165 $00{:}12{:}00{.}370 \dashrightarrow 00{:}12{:}04.090$ is to keep evaluating these dynamic contexts

 $166\ 00:12:05.100 \longrightarrow 00:12:08.040$ throughout the project and beyond.

 $167\ 00:12:08.040 \dashrightarrow 00:12:12.450$ So that's something that might be really useful

168 00:12:12.450 --> 00:12:17.450 and interesting for us as implementation researchers.

169 00:12:18.537 --> 00:12:23.070 And this brief introduction about context evaluation

170 00:12:23.070 --> 00:12:26.490 is connected with the role

 $171\ 00:12:26.490 \longrightarrow 00:12:31.490$ that this type of evaluation might have

172 00:12:32.250 --> 00:12:37.077 in the description and approach

173 00:12:37.077 --> 00:12:41.277 to the definition of usual care or enhanced usual care

 $174\ 00:12:41.277 \longrightarrow 00:12:43.197$ in our project.

175 00:12:43.197 --> 00:12:44.550 And to go into this topic,

176 00:12:44.550 --> 00:12:49.550 I'd like to share with you an example of a trial,

177 00:12:49.746 --> 00:12:51.763 a cluster-randomized controlled trial,

178 00:12:51.763 --> 00:12:56.763 that we conducted in Argentina a few years ago.

179 00:12:56.863 --> 00:13:01.863 It was about testing a comprehensive intervention

 $180\ 00:13:02.513 \longrightarrow 00:13:06.388$ for improving hypertension control

181 00:13:06.388 --> 00:13:10.996 in vulnerable population in our country.

 $182\ 00{:}13{:}10.996$ --> $00{:}13{:}15.278$ You know that hypertension is a leading global risk factor

183 00:13:15.278 --> 00:13:19.180 for cardiovascular disease and death,

 $184\ 00:13:19.180 \longrightarrow 00:13:24.180$ and about 75% of people with hypertension

185 00:13:25.680 $\rightarrow 00:13:29.730$ live in low- and middle income countries.

186 00:13:29.730 --> 00:13:32.274 And this, again, is pre-pandemic.

 $187\ 00:13:32.274 \longrightarrow 00:13:36.573$ After the pandemic, it's even worse.

188 00:13:37.830 --> 00:13:40.830 The other thing that is very important and critical for us

189 00:13:40.830 --> 00:13:45.830 is that less than 10% hypertensive patients in our countries

 $190\ 00:13:46.920 \longrightarrow 00:13:48.790$ are under control,

191 $00:13:48.790 \rightarrow 00:13:53.110$ or have their blood pressure under control.

 $192\ 00:13:53.110 \longrightarrow 00:13:55.676$ In the case of Argentina,

 $193\ 00:13:55.676 \longrightarrow 00:13:59.760$ the control rate is about 18%,

194 00:13:59.760 --> 00:14:04.760 according to our last estimations, again, prepandemic.

195 00:14:05.760 --> 00:14:10.760 We have some data from 2021 and early this year

196 00:14:11.932 --> 00:14:16.932 which indicates that the control rate is even worse.

197 00:14:19.484 --> 00:14:20.901 Well, so briefly,

 $198\ 00:14:22.173 \longrightarrow 00:14:27.173$ in this trial we selected 18 primary care clinics

 $199\ 00:14:27.330 \longrightarrow 00:14:30.900$ in different provinces in the country,

200 00:14:30.900 --> 00:14:35.900 and included participants who were adults with hypertension,

 $201\ 00:14:38.400 \longrightarrow 00:14:40.360$ who were really controlled,

202 00:14:40.360 --> 00:14:44.790 and defined full control of hypertension

203 00:14:44.790 --> 00:14:47.430 as having a systolic blood pressure

204 00:14:47.430 --> 00:14:52.430 of 140 millimeters of mercury, or above that number,

 $205\ 00:14:54.373 \longrightarrow 00:14:56.951$ and/or a diastolic blood pressure

206 00:14:56.951 --> 00:14:59.368 of 90 millimeters of mercury.

207 00:15:00.510 --> 00:15:03.595 We included these patients,

 $208\ 00:15:03.595 \longrightarrow 00:15:07.140$ their spouses, with or without hypertension,

 $209\ 00:15:07.140 \longrightarrow 00:15:10.170$ because part of the intervention

 $210\ 00:15:10.170 \longrightarrow 00:15:13.530$ was related to the role of peers,

211 00:15:13.530 --> 00:15:16.500 family members and people living

 $212\ 00:15:16.500 \longrightarrow 00:15:19.269$ with these hypertensive patients,

213 00:15:19.269 --> 00:15:24.150 and also, any other adult hypertensive family member

 $214\ 00:15:24.150 \longrightarrow 00:15:26.820$ living in the same household.

 $215\ 00:15:26.820 \longrightarrow 00:15:29.793$ That was the population of the study.

216 00:15:30.957 --> 00:15:33.963 And this is, again, briefly the flow chart of the trial.

217 00:15:37.680 --> 00:15:42.660 We included 18 public primary care clinics

218 00:15:42.660 --> 00:15:47.455 that were randomized to the intervention or the control.

 $219\ 00:15:47.455 \longrightarrow 00:15:50.490$ And here is the topic, the control arm.

 $220\ 00{:}15{:}50{.}490$ --> $00{:}15{:}55{.}200$ We conducted measurements at baseline six, 12 and 18 months,

 $221\ 00:15:57.613 \longrightarrow 00:15:59.730$ the outcomes of the study,

222 00:15:59.730 --> 00:16:04.680 for changes in systolic and diastolic blood pressure

 $223\ 00:16:04.680 \longrightarrow 00:16:06.830$ and hypertension control rate at 18 months.

 $224\ 00:16:11.520 \longrightarrow 00:16:14.700$ And this is a summary of the intervention.

 $225\ 00:16:14.700 \longrightarrow 00:16:17.130$ We defined three main components.

226 00:16:17.130 --> 00:16:20.400 The most important one was connected

 $227\ 00:16:20.400 \longrightarrow 00:16:23.549$ with the role of community health workers

228 00:16:23.549 --> 00:16:27.743 working as part of the primary care team

229 00:16:27.743 --> 00:16:32.310 and working with the participants, with the patients,

230 00:16:32.310 --> 00:16:34.290 at their homes.

231 00:16:34.290 --> 00:16:35.580 In this intervention,

232 00:16:35.580 --> 00:16:38.693 community health workers visited patients at their homes,

 $233\ 00:16:41.700 \longrightarrow 00:16:44.910$ working with their family as well.

234 00:16:44.910 --> 00:16:48.780 Patients were provided with BP monitors

 $235\ 00:16:48.780 \longrightarrow 00:16:52.770$ to self-monitor their blood pressure.

236 00:16:52.770 --> 00:16:55.770 Community health workers trained them

237 00:16:55.770 --> 00:16:59.160 on how to use these devices

238 00:16:59.160 \rightarrow 00:17:02.640 and to monitor their blood pressure.

 $239\ 00:17:02.640 \longrightarrow 00:17:05.285$ They, community health workers,

240 00:17:05.285 --> 00:17:09.390 also provided information and tools,

241 00:17:09.390 --> 00:17:13.701 different tools to improve medication adherence

 $242\ 00:17:13.701 \longrightarrow 00:17:17.340$ and lifestyle modifications.

243 00:17:17.340 --> 00:17:21.833 So mainly this part of the intervention was very important

244 $00{:}17{:}21.833 \dashrightarrow 00{:}17{:}25.090$ and was led by community health workers

 $245\ 00:17:26.550 \longrightarrow 00:17:28.803$ that were trained to do that.

246 00:17:30.691 --> 00:17:34.860 The other component was an mHealth component.

 $247\ 00:17:34.860 \longrightarrow 00:17:38.730$ We sent messages, text messages,

 $248\ 00:17:38.730 \longrightarrow 00:17:43.730$ to participants about lifestyle modifications,

249 00:17:44.490 --> 00:17:48.443 mainly diet and physical activity, that was the focus,

250 00:17:49.407 --> 00:17:52.830 and again, medication adherence.

251 00:17:52.830 --> 00:17:56.883 And the third component was directed to physicians,

 $252\ 00:18:00.211 \longrightarrow 00:18:02.740$ primary care physicians.

253 00:18:02.740 --> 00:18:05.724 Primary care physicians were trained

 $254\ 00:18:05.724 \longrightarrow 00:18:09.290$ in the use of clinical practice guidelines

255 00:18:09.290 --> 00:18:13.040 and they also received information, feedback,

256 00:18:14.340 --> 00:18:18.633 about the blood pressure values of their patients.

257 00:18:20.100 --> 00:18:25.100 What they did when they saw the blood pressure values

258 00:18:29.790 --> 00:18:34.770 of their patients was something that they decided

259 00:18:34.770 --> 00:18:35.603 by their own.

 $260\ 00:18:38.140 \longrightarrow 00:18:41.940$ Apart from an initial training on the use

261 00:18:41.940 \rightarrow 00:18:45.720 and contents of clinical practice guidelines,

262 00:18:45.720 --> 00:18:50.310 we did not do anything else with decisions.

263 00:18:50.310 --> 00:18:55.107 So they decided what to do, how to manage their patients,

 $264\ 00:18:55.107 \longrightarrow 00:18:58.075$ but they received this information

 $265\ 00:18:58.075 \longrightarrow 00:19:01.158$ that is not part of the initial care.

266 00:19:02.207 --> 00:19:03.120 <v ->Vilma, I have a question.</v> <v ->Yes.</v>

267 00:19:03.120 --> 00:19:03.953 <v Donna>Can you say</v>

 $268\ 00:19:03.953 \longrightarrow 00:19:07.080$ what blood pressure audit and feedback is?

269 00:19:07.080 --> 00:19:09.660 <v ->Yes.</v> <v ->That's the second component.</v>

 $270\ 00:19:09.660 \longrightarrow 00:19:11.973 < v \longrightarrow Ves$, that's the second component. </v>

271 00:19:12.930 --> 00:19:16.390 What we did is the community health worker

272 00:19:18.240 --> 00:19:20.730 visited patient's home each month

273 00:19:20.730 --> 00:19:23.913 during the first six months, and then bimonthly.

 $274\ 00:19:25.440 \longrightarrow 00:19:28.830$ When they went to a patient's home,

 $275\ 00:19:28.830 \longrightarrow 00:19:31.250$ they reviewed, with the patient,

 $276\ 00:19:31.250 \longrightarrow 00:19:35.336$ all the values of their blood pressure,

277 00:19:35.336 --> 00:19:37.188 according to a log

 $278\ 00:19:37.188 \longrightarrow 00:19:40.938$ that the participants were asked to complete.

279 00:19:41.940 --> 00:19:45.000 And that information was shared

280 00:19:45.000 --> 00:19:48.630 by the community health worker with the physician.

281 00:19:48.630 --> 00:19:50.064 That's the feedback,

 $282\ 00{:}19{:}50.064$ --> $00{:}19{:}55.064$ that's the component of sharing data with the physician.

 $283\ 00:19:57.360$ --> 00:20:02.360 And that's all what we did in that component.

284 00:20:03.960 --> 00:20:06.900 Some physicians were very proactive,

285 00:20:06.900 --> 00:20:10.740 and they take action and adjust medication, et cetera,

286 00:20:10.740 --> 00:20:12.630 and others not.

287 00:20:12.630 --> 00:20:16.330 We haven't had nothing to do directly

 $288\ 00:20:17.430 \longrightarrow 00:20:20.460$ through the trial with that.

 $289\ 00:20:20.460 \longrightarrow 00:20:22.083$ So that was that component.

290 00:20:23.670 --> 00:20:26.370 And it's important to your question, Donna,

 $291\ 00:20:26.370 \longrightarrow 00:20:27.493$ because at the time,

292 00:20:27.493 --> 00:20:32.400 there were no electronic medical records in these clinics.

293 00:20:32.400 --> 00:20:36.330 Now, in these provinces, the situation is different,

 $294\ 00:20:36.330 \longrightarrow 00:20:40.563$ so we would be able to do this differently now.

295 00:20:42.060 --> 00:20:45.327 And I can tell you what's happening now

 $296\ 00:20:45.327 \longrightarrow 00:20:47.577$ in these provinces as well.

297 00:20:49.411 --> 00:20:53.260 Well, so these are briefly the three components

298 00:20:54.180 --> 00:20:56.343 of the intervention.

299 00:20:57.485 --> 00:21:02.290 This is, for example, a picture of the training sessions

300 00:21:03.420 --> 00:21:06.873 for community health workers at the university,

 $301\ 00:21:08.667 \longrightarrow 00:21:12.570$ and these are some examples of the tools

302 00:21:12.570 --> 00:21:17.570 that the community health worker share with participants,

 $303\ 00:21:18.355 \longrightarrow 00:21:20.355$ for example, pill boxes,

 $304\ 00:21:23.071 \longrightarrow 00:21:26.488$ to help improving adherence to medication

 $305\ 00{:}21{:}28{.}471$ --> $00{:}21{:}33{.}471$ and other tools that they share with patients as well.

 $306\ 00{:}21{:}36{.}570 \dashrightarrow 00{:}21{:}41{.}029$ They, community health workers, trained participants

 $307\ 00{:}21{:}41.029$ --> $00{:}21{:}45.946$ on how to measure and monitor their blood pressure as well.

 $308\ 00:21:48.510 \longrightarrow 00:21:51.123$ And everything happened at home.

 $309\;00{:}21{:}53{.}520 \dashrightarrow > 00{:}21{:}57{.}753$ Well, some of the results, what happened with this trial?

310 00:21:59.809 --> 00:22:00.642 In this table,

311 00:22:00.642 --> 00:22:05.642 we describe the main characteristics of our participants.

312 00:22:05.790 --> 00:22:10.790 As you can see, the mean age was around 56 years old,

 $313\ 00:22:16.170 \longrightarrow 00:22:17.320$ half of them were women

 $314\ 00:22:19.473 \longrightarrow 00:22:24.150$ and what else I'd like to highlight here

315 00:22:24.150 $\rightarrow 00:22:26.220$ were patients were poorly controlled,

 $316\ 00:22:26.220 \longrightarrow 00:22:30.030$ that was a criteria to enter the study.

 $317\ 00:22:30.030 \longrightarrow 00:22:32.370$ You can see also in this table

318 00:22:32.370 --> 00:22:35.850 that the use of antihypertensive medication was very high.

 $319\ 00:22:38.033 \longrightarrow 00:22:41.566$ This is the public system in Argentina

 $320\ 00:22:41.566 \longrightarrow 00:22:45.566$ and medication is provided for free to patients.

 $321\ 00:22:48.172 \longrightarrow 00:22:51.953$ The problem is that there are periods of time

322 00:23:00.664 --> 00:23:04.110 where the centers don't have enough medication

 $323\ 00:23:04.110 \longrightarrow 00:23:04.943$ for patients.

324 00:23:04.943 --> 00:23:07.023 That's very frequent, that's very frequent.

325 00:23:07.860 --> 00:23:10.920 So in spite of being a high percentage,

326 00:23:10.920 --> 00:23:14.760 high proportion of patients being treated,

 $327\ 00:23:14.760 \longrightarrow 00:23:17.820$ the problem here was more connected

328 00:23:17.820 --> 00:23:21.393 with continuity of treatment,

329 00:23:22.830 --> 00:23:27.817 in part because of lack of medication during some months.

330 00:23:27.817 --> 00:23:29.634 <v Donna>Can I make a comment right here on this?</v>

331 00:23:29.634 --> 00:23:31.020 <v ->Yes, sure.</v> <v ->So I see that you</v>

332 00:23:31.020 --> 00:23:33.960 sort of started off in a bad-luck situation,

 $333\ 00:23:33.960 \longrightarrow 00:23:36.160$ where the intervention group

334 00:23:37.170 --> 00:23:40.860 had significantly higher history of CVD

335 00:23:40.860 --> 00:23:43.350 and higher systolic and diastolic blood pressure.

 $336\ 00:23:43.350 \longrightarrow 00:23:45.660$ It's not huge differences,

 $337\ 00:23:45.660 \longrightarrow 00:23:47.820$ but usually with sample sizes like that,

338 00:23:47.820 --> 00:23:51.370 you don't see significant differences in a randomized trial.

339 00:23:51.370 --> 00:23:52.770 <v ->Yeah.</v> <v ->But maybe it's because</v>

340 00:23:52.770 --> 00:23:56.400 of the cluster randomization and there might have been...

341 00:23:56.400 --> 00:23:59.460 I don't know what the ICC was with the clusters,

342 00:23:59.460 --> 00:24:02.940 but may
be there was a lot of variation in the clusters,

343 00:24:02.940 --> 00:24:07.537 so that it's much easier to have a bad-luck randomization

344 00:24:07.537 --> 00:24:08.819 like this. $\langle v - \rangle Yes. \langle v \rangle$

 $345\ 00:24:08.819 \longrightarrow 00:24:10.652$ It was just like that.

346 00:24:12.069 --> 00:24:16.113 And in our calculation, our sample size,

347 00:24:18.561 --> 00:24:22.170 we estimated an ICC of 0.06,

 $348\ 00:24:22.170 \longrightarrow 00:24:24.960$ that was our sample size calculation,

 $349\ 00:24:24.960 \longrightarrow 00:24:27.723$ but then, after conducting the trial,

 $350\ 00:24:29.443 \longrightarrow 00:24:31.053$ the actual ICC was 0.15.

351 00:24:32.994 --> 00:24:36.045 <v ->Wow, yeah that is-</v> <v ->It was very high.</v>

352 00:24:36.045 --> 00:24:37.462 It was very high.

 $353\ 00:24:39.450 \longrightarrow 00:24:43.920$ Well, so this is the population

 $354\ 00:24:43.920 \longrightarrow 00:24:47.400$ and what happened with our outcomes,

355 00:24:47.400 --> 00:24:52.400 systolic, diastolic blood pressure and hypertension control.

 $356\ 00:24:53.370 \longrightarrow 00:24:54.930$ Before going into that,

357 00:24:54.930 --> 00:24:58.950 I'd like to remind you that...

358 00:24:58.950 --> 00:25:02.040 Or not remind, I think I didn't say it.

 $359\ 00:25:02.040 \longrightarrow 00:25:03.800$ I think I didn't say it.

360 00:25:03.800 --> 00:25:07.870 If can go back to the previous slide...

361 00:25:14.067 --> 00:25:15.243 But it doesn't matter.

362 00:25:16.530 --> 00:25:20.250 One important thing here, in terms of our topic today,

 $363\ 00:25:20.250 \longrightarrow 00:25:21.747$ which is the control group

 $364\ 00:25:21.747 \longrightarrow 00:25:24.720$ and how to evaluate the control group,

 $365\ 00:25:24.720 \longrightarrow 00:25:29.040$ is that we conducted evaluation visits,

366 00:25:29.040 --> 00:25:34.040 study evaluation visits, at baseline six, 12 and 18 months.

367 00:25:35.776 --> 00:25:39.817 And who conducted those visits?

368 00:25:39.817 --> 00:25:43.110 We trained the study nurses

 $369\ 00:25:43.110 \longrightarrow 00:25:45.900$ who were part of the medical staff

 $370\ 00:25:45.900 \longrightarrow 00:25:50.900$ of the primary care team in each clinic,

 $371\ 00:25:51.840 \longrightarrow 00:25:56.520$ that is, the nurses in charge of conducting

372 00:25:56.520 --> 00:26:01.520 the evaluation visits were part of the primary care team.

 $373\ 00:26:02.340 \longrightarrow 00:26:04.740$ And this is important later

 $374\ 00:26:04.740 \longrightarrow 00:26:08.160$ for the interpretation of our results.

375 00:26:08.160 --> 00:26:10.350 <v Attendee>Vilma, are you saying that...
(v>

 $376\ 00:26:10.350 \longrightarrow 00:26:12.630$ Was that by design or in retrospect?

377 00:26:12.630 --> 00:26:14.010 Maybe you wouldn't have preferred that?

378 00:26:14.010 --> 00:26:16.530 I mean, it seems like if they're part of the group,

 $379\ 00:26:16.530 \longrightarrow 00:26:18.090$ it might be hard for them to be objective.

 $380\ 00:26:18.090 \longrightarrow 00:26:20.610$ Is that the point that you're making?

381 00:26:20.610 --> 00:26:23.070 <v ->Yes, yes.</v>

 $382\ 00:26:23.070 \longrightarrow 00:26:27.420$ Yes, but it was so by design really,

383 00:26:27.420 --> 00:26:31.440 because in my view, there is a trade-off here, you know?

 $384\ 00:26:31.440 \longrightarrow 00:26:34.200$ This is very warm, our population.

385 00:26:34.200 --> 00:26:37.710 So sometimes it's difficult to enter

386 00:26:37.710 --> 00:26:42.180 in the neighborhood and be accepted by people.

387 00:26:42.180 --> 00:26:45.270 People have to open their door

 $388\ 00:26:45.270 \longrightarrow 00:26:50.270$ for you to conduct these evaluations,

 $389\ 00:26:50.490 \longrightarrow 00:26:52.980$ and for them, it's very important

 $390\ 00:26:52.980 \longrightarrow 00:26:57.630$ that they know these people.

 $391\ 00:26:57.630 \longrightarrow 00:27:00.993$ So we thought a lot about that and said,

 $392\ 00:27:01.950 \longrightarrow 00:27:04.620$ "Well, we can hire nurses

393 00:27:04.620 --> 00:27:09.620 and do this absolutely independent of the primary care team,

 $394\ 00:27:10.380 \longrightarrow 00:27:12.540$ but in our opinion,

 $395\ 00:27:12.540 \longrightarrow 00:27:14.580$ it would have been very difficult

 $396\ 00:27:14.580 \longrightarrow 00:27:17.397$ for them to enter many of these houses."

397 00:27:18.356 --> 00:27:23.356 So we say, "Well, we trained, in depth and intensively,

 $398\ 00:27:25.770 \longrightarrow 00:27:30.573$ these nurses on how to make the evaluations, $399\ 00:27:31.500 \longrightarrow 00:27:33.570$ how to collect the data.

 $400\ 00:27:33.570 -> 00:27:36.670$ They were trained not to do anything else

 $401\ 00:27:37.530 \longrightarrow 00:27:40.713$ when they conducted these evaluation visits,

 $402\ 00:27:41.700 --> 00:27:44.941$ but they were part of the primary care team,

403 00:27:44.941 --> 00:27:48.963 and people know that, so that's important, yeah,

 $404\ 00:27:51.480 \longrightarrow 00:27:55.860$ Well, what happened then with our outcomes?

405 00:27:55.860 --> 00:27:58.620 We can see here the effect of the intervention

406 00:27:58.620 --> 00:28:01.213 on systolic blood pressure.

407 00:28:01.213 --> 00:28:06.213 There was a significant reduction in the intervention group

 $408\ 00{:}28{:}10.350 \dashrightarrow 00{:}28{:}14.657$ early at six months, and this effect was present

409 00:28:16.663 --> 00:28:19.470 until the end of the study as well.

 $410\ 00:28:19.470 \longrightarrow 00:28:21.870$ So we have these positive results,

411 00:28:21.870 --> 00:28:25.351 in terms of systolic blood pressure.

412 00:28:25.351 $\rightarrow 00:28:28.991$ But if you look at the control group here,

 $413\ 00:28:28.991 \longrightarrow 00:28:33.487$ the control group also presented improvement

 $414\ 00:28:38.477 \longrightarrow 00:28:42.503$ in the systolic blood pressure of their patients.

415 00:28:43.350 --> 00:28:48.180 And the same happened with diastolic blood pressure.

416 00:28:48.180 --> 00:28:51.090 The reduction was significantly different

 $417\ 00:28:51.090 \longrightarrow 00:28:52.560$ between the two groups,

 $418\ 00:28:52.560 \longrightarrow 00:28:55.323$ but again, in the control group,

419 00:28:56.340 --> 00:29:00.270 there was an improvement, a significant improvement,

420 00:29:00.270 --> 00:29:03.240 within this arm.

 $421\ 00:29:03.240 \longrightarrow 00:29:06.690$ And same thing when we look

422 00:29:06.690 --> 00:29:08.710 into the proportion of participants

 $423\ 00:29:10.290 \longrightarrow 00:29:13.370$ with their blood pressure under control.

424 00:29:15.210 --> 00:29:20.210 Again, the difference was significant between the arms,

425 00:29:21.330 --> 00:29:24.873 but there was improvement in the control group.

426 00:29:30.210 --> 00:29:34.380 Well these are some data about mediators,

 $427\ 00:29:34.380 \longrightarrow 00:29:39.380$ like adherence to medication, which was improved over time,

428 00:29:41.460 --> 00:29:46.460 and the same happened with adjustment of medication

 $429\ 00:29:47.850 \longrightarrow 00:29:49.623$ by physicians.

430 00:29:53.310 --> 00:29:55.410 And here we come to the topic now

 $431\ 00:29:55.410 \longrightarrow 00:29:57.810$ that we want to discuss today.

432 00:29:57.810 --> 00:30:00.423 There was this improvement in the control group,

433 00:30:01.530 --> 00:30:06.440 and trying to interpret, the best way we can, these results.

 $434\ 00:30:06.440 \longrightarrow 00:30:10.290$ So we conducted several in-depth interviews

 $435\ 00:30:10.290 \longrightarrow 00:30:13.023$ with participants from the control group.

436 00:30:18.690 --> 00:30:21.723 Usually we conduct interviews

437 00:30:23.713 --> 00:30:26.963 with a particular focus on participants

438 00:30:28.017 --> 00:30:30.840 in the intervention group, you know?

439 00:30:30.840 --> 00:30:34.290 Because we want to learn about the perceptions

440 00:30:34.290 --> 00:30:36.090 about the intervention,

441 00:30:36.090 --> 00:30:40.650 whether it was more appealing for patients or not,

 $442\ 00:30:40.650$ --> 00:30:43.503 and things like acceptance and other topics.

443 00:30:44.550 --> 00:30:49.503 We pay a lot of attention usually to the intervention group,

 $444\ 00:30:51.371$ --> 00:30:56.371 and we do, wrongly, less work with the control of our study.

 $445\ 00:30:59.010 \longrightarrow 00:31:01.833$ In this case, and seeing those results,

 $446\ 00:31:02.956 \longrightarrow 00:31:05.760$ we conducted these interviews,

 $447\ 00:31:05.760 \longrightarrow 00:31:08.280$ and we found that first,

448 00:31:08.280 --> 00:31:12.930 patients valued, really, being visited by nurses

449 00:31:12.930 --> 00:31:17.403 from their clinics, from their primary care centers.

 $450\ 00:31:18.960 \longrightarrow 00:31:22.590$ They felt care, you know?

451 00:31:22.590 --> 00:31:26.763 They valued that and that was something positive for them

 $452\ 00:31:26.763 \longrightarrow 00:31:29.180$ and for their own healthcare.

 $453\ 00:31:30.975 \longrightarrow 00:31:33.390$ The other thing that happened

 $454\ 00:31:33.390$ --> 00:31:38.390 was that nurses provided some counseling, you know?

 $455\ 00{:}31{:}39{.}120$ --> 00:31:42.330 I mean, they were in contact with these patients,

 $456~00{:}31{:}42{.}330 \dashrightarrow 00{:}31{:}47{.}330$ they knew them and they provided counseling about,

 $457\ 00:31:47.610 \longrightarrow 00:31:49.860$ for example, how to get medication.

458 00:31:49.860 --> 00:31:54.222 You have travel when you go to the primary care center.

 $459\ 00:31:54.222 \longrightarrow 00:31:55.291$ What can you do?

460 00:31:55.291 --> 00:31:57.703 "I can help you with this," and comments of this kind.

461 00:31:59.451 --> 00:32:04.451 And the nurses did that and that's a great thing, of course,

462 00:32:04.556 $\rightarrow 00:32:08.367$ that help us understand better the results.

463 00:32:09.530 --> 00:32:14.530 Patients in the control group increased the number of visits

464 00:32:14.701 --> 00:32:19.701 to the clinic, for example, without any other intervention

465 00:32:20.220 $\rightarrow 00:32:24.783$ but these visits, these evaluation visits.

 $466\ 00:32:26.640 \longrightarrow 00:32:29.940$ So we know all these aspects

467 $00:32:29.940 \rightarrow 00:32:31.920$ because of this qualitative approach.

 $468\ 00:32:31.920 \longrightarrow 00:32:35.760$ It was a very limited qualitative approach

469 00:32:35.760 --> 00:32:38.813 that we were able to do in this case,

470 00:32:40.650 --> 00:32:45.650 but my question for you, and my reflection on that,

 $471\ 00:32:45.673 \longrightarrow 00:32:50.673$ is how to better design the qualitative phase,

 $472\ 00:32:51.663 \rightarrow 00:32:54.930$ the qualitative components of our research,

 $473\ 00:32:54.930 \longrightarrow 00:32:56.537$ to get information,

 $474\ 00:32:56.537 \longrightarrow 00:32:59.520$ not only on the intervention perceptions,

 $475\ 00:32:59.520 \longrightarrow 00:33:01.680$ the intervention group, et cetera,

476 00:33:01.680 --> 00:33:06.680 but also what is happening with the usual care group,

 $477\ 00:33:06.881 \longrightarrow 00:33:09.030$ or standard care group,

478 00:33:09.030 --> 00:33:14.030 and what people in this arm feel and is exposed to

 $479\ 00:33:14.340 \longrightarrow 00:33:17.670$ during the study in general.

 $480\ 00:33:17.670 \longrightarrow 00:33:18.540$ And the other thing

481 00:33:18.540 --> 00:33:22.143 that I was talking to Dr. Raphael yesterday

 $482\ 00:33:24.330 \longrightarrow 00:33:27.750$ was about the use of existing databases

483 00:33:27.750 --> 00:33:32.700 to get information about not only the control arm,

484 00:33:32.700 --> 00:33:35.010 but all the other centers

485 00:33:35.010 --> 00:33:38.520 that are a part of our target population, and therefore,

 $486\ 00:33:38.520 \longrightarrow 00:33:40.620$ not included in the study,

 $487\ 00:33:40.620 -> 00:33:43.893$ because that would be usual care, really.

488 00:33:45.060 --> 00:33:47.430 And I was talking with Donna this morning,

489 00:33:47.430 --> 00:33:52.340 how to incorporate those things, if those data exist,

 $490\ 00:33:53.490 \longrightarrow 00:33:56.280$ how to incorporate them to better understand

 $491\ 00:33:56.280 \longrightarrow 00:33:58.673$ what is usual care of centers

 $492\ 00:33:59.652 \longrightarrow 00:34:02.852$ that are not part of a clinical trial,

 $493\ 00:34:02.852 \longrightarrow 00:34:05.152$ like in this case, for example.

494 00:34:05.152 --> 00:34:10.152 So that's something that we can study and develop, you know,

 $495\ 00:34:13.540 \longrightarrow 00:34:16.197$ in that type of approach.

496 00:34:16.197 --> 00:34:18.060 We're trying to do that

 $497\ 00:34:18.060 \rightarrow 00:34:21.465$ in another cluster-randomized controlled trial

 $498\ 00:34:21.465 \longrightarrow 00:34:25.380$ that we are conducting now in Guatemala.

 $499\ 00:34:25.380 \longrightarrow 00:34:27.093$ Based on these results,

500 00:34:28.740 --> 00:34:33.427 we started a new project with our team in Guatemala.

 $501\ 00:34:34.453 \longrightarrow 00:34:36.570$ We adapted this intervention

 $502\ 00:34:36.570 \longrightarrow 00:34:39.040$ that I presented a few minutes ago

503 00:34:42.230 --> 00:34:44.907 to the context of Guatemala.

 $504\ 00:34:45.938 \longrightarrow 00:34:47.550$ There were a lot of adaptations,

 $505\ 00{:}34{:}47.550 \dashrightarrow 00{:}34{:}51.518$ and we don't have time today to go into much detail,

 $506\ 00:34:51.518 \longrightarrow 00:34:52.792$ but we designed,

507 00:34:52.792 --> 00:34:56.460 in this cluster-randomized controlled trial in Guatemala,

508 00:34:56.460 --> 00:35:00.280 we included 32 primary care clinics

509 00:35:03.663 --> 00:35:06.897 in different districts in Guatemala,

 $510\ 00:35:06.897 \longrightarrow 00:35:11.280$ and they were randomized to the intervention

 $511\ 00:35:11.280 \longrightarrow 00:35:14.397$ or the usual care arm of the study.

 $512\ 00:35:16.830 \longrightarrow 00:35:19.560$ And the intervention, as I said before,

 $513\ 00:35:19.560 \longrightarrow 00:35:23.280$ was based on the experience in Argentina,

 $514\ 00:35:23.280 \longrightarrow 00:35:25.807$ but we did a lot of adaptations.

 $515\ 00:35:25.807 \longrightarrow 00:35:27.990$ These are the final components

 $516\ 00:35:27.990 \longrightarrow 00:35:31.040$ of the intervention in Guatemala.

517 00:35:31.040 --> 00:35:31.873 <v Donna>How was it adapted?</v>

 $518\ 00:35:31.873 \longrightarrow 00:35:34.200$ It kinds looks the same to me.

519 00:35:34.200 --> 00:35:36.120 <v ->I'm sorry?</v> <v ->How was it adapted,</v>

520 00:35:36.120 --> 00:35:39.030 because it looks very similar, or even the same,

 $521\ 00:35:39.030 \longrightarrow 00:35:41.790$ as the Argentina intervention components?

 $522\ 00:35:41.790 \longrightarrow 00:35:44.040 < v \longrightarrow Ves$, there are a lot of similarities, </v>

 $523\ 00:35:44.040 \longrightarrow 00:35:46.250$ there are a lot of similarities.

52400:35:46.250 --> 00:35:49.410 But for example, the mHealth component,

525 00:35:49.410 --> 00:35:53.820 which was text messages in Argentina, is not here,

 $526\ 00:35:53.820 \longrightarrow 00:35:55.950$ is not part of the trial in Guatemala,

527 00:35:55.950 --> 00:36:00.897 because of the very high proportion of illiteracy

528 00:36:02.040 --> 00:36:03.690 in Guatemala.

 $529\ 00:36:03.690 \longrightarrow 00:36:06.960$ So there is a high proportion of people

 $530\ 00:36:06.960 \longrightarrow 00:36:11.070$ who cannot read and write,

531 00:36:11.070 --> 00:36:16.070 so we did a lot of work trying to adapt, with visual aids,

 $532\ 00:36:17.554 \longrightarrow 00:36:20.721$ the messages, but we didn't find a way

 $533\ 00:36:23.379 \longrightarrow 00:36:25.511$ to make it feasible here,

 $534\ 00:36:25.511 \longrightarrow 00:36:28.178$ so that's not part of the trial.

535 00:36:29.507 --> 00:36:34.507 There, home blood pressure monitoring is quite the same.

 $536\ 00:36:34.680 \longrightarrow 00:36:37.820$ What we adapted here is the training,

 $537\ 00:36:40.427 \longrightarrow 00:36:42.300$ or the education of patients,

 $538\ 00:36:42.300 \longrightarrow 00:36:44.760$ on how to use these devices,

 $539\ 00:36:44.760 \longrightarrow 00:36:46.350$ again, for the same reason.

 $540\ 00:36:46.350 \longrightarrow 00:36:51.030$ So we used pictures, for example, for patients

541 00:36:51.030 \rightarrow 00:36:54.965 and we did a lot of training with the patient,

542 00:36:54.965 --> 00:36:59.965 just to be sure that they were able to use those devices.

543 00:37:02.628 --> 00:37:06.870 And here, about the team collaborative approach,

544 00:37:06.870 --> 00:37:11.870 in Guatemala, the system is organized in a different way,

545 00:37:12.164 --> 00:37:14.940 compared to Argentina,

 $546\ 00:37:14.940 \longrightarrow 00:37:17.913$ so we have to work with more levels.

 $547\ 00:37:19.650 \longrightarrow 00:37:24.123$ For example, in this clinic, there is no doctor.

548 00:37:25.443 --> 00:37:28.803 In Argentina, each primary care clinic

 $549\ 00:37:28.803 \longrightarrow 00:37:33.210$ has a primary care team with at least a doctor,

550 00:37:33.210 --> 00:37:36.390 in general, a general practitioner,

 $551\ 00:37:36.390 \longrightarrow 00:37:39.120$ one nurse and one community health worker.

 $552\ 00:37:39.120 \longrightarrow 00:37:41.243$ That's more or less a rule,

 $553\ 00{:}37{:}41.243$ --> $00{:}37{:}46.243$ and in some clinics there are more people and more doctors

 $554\ 00:37:47.460 \longrightarrow 00:37:50.523$ or nurses or community health workers.

555 00:37:50.523 --> 00:37:52.930 In Guatemala, in each clinic,

 $556\ 00:37:52.930 \longrightarrow 00:37:57.060$ there is one auxiliary nurse at least,

557 00:37:57.060 --> 00:38:01.173 and may
be that's the only personnel at the clinic.

 $558\ 00:38:02.190 \longrightarrow 00:38:06.600$ In the higher level of clinics,

 $559\ 00:38:06.600 \longrightarrow 00:38:08.317$ they have also a nurse,

560 00:38:09.971 --> 00:38:14.253 and then they have centers where they have doctors.

 $561\ 00:38:15.510 \longrightarrow 00:38:18.810$ These are interconnected,

562 00:38:18.810 --> 00:38:22.099 but you have to work with these different pieces.

563 00:38:22.099 --> 00:38:26.652 So this collaborative team approach was different

 $564\ 00:38:26.652 \longrightarrow 00:38:29.527$ as the ones in Argentina.

565 00:38:29.527 --> 00:38:33.944 A lot of other things are very similar, very similar.

566 00:38:35.551 $\rightarrow 00:38:38.943$ So this is the intervention in Guatemala.

567 00:38:38.943 --> 00:38:43.943 In Guatemala, and this maybe is a topic for another meeting,

 $568\ 00:38:46.260 \longrightarrow 00:38:48.930$ we have other types of challenges

 $569\ 00:38:48.930 \longrightarrow 00:38:53.930$ connected with the different ethnic groups.

 $570\ 00{:}38{:}54{.}450$ --> $00{:}38{:}59{.}450$ In Guatemala, there are many different populations,

571 00:39:01.080 --> 00:39:06.080 that, for example, some of them speak Spanish,

 $572\ 00:39:06.717 \longrightarrow 00:39:08.790$ some of them are bilingual,

573 00:39:08.790 --> 00:39:13.290 so they speak Spanish and a Mayan language,

57400:39:13.290 --> 00:39:17.670 and some of them speak only in Mayan languages,

575 00:39:17.670 --> 00:39:22.670 and some Mayan languages have a written form and others not.

576 00:39:24.570 --> 00:39:29.570 So there we have another very, very challenging situation

 $577\ 00:39:31.601 \longrightarrow 00:39:34.270$ and we work a lot with the materials

 $578\ 00:39:35.280 \longrightarrow 00:39:38.767$ and according to these different populations.

579 00:39:38.767 --> 00:39:43.767 (participants speaking in foreign language)

580 00:39:55.064 --> 00:40:00.064 (participants speaking in foreign language continues)

 $581\ 00:40:08.443 \longrightarrow 00:40:13.350$ Okay, so well, this is study in Guatemala

 $582\ 00:40:15.059 \longrightarrow 00:40:18.123$ and the field work.

 $583\ 00:40:20.220 \longrightarrow 00:40:22.401$ Equity, this is another topic. (laughs) $584\ 00:40:22.401 \longrightarrow 00:40:23.763$ This is another big topic. 585 00:40:30.150 --> 00:40:35.040 So what's the state of the study in Guatemala? $586\ 00:40:35.040 \longrightarrow 00:40:38.553$ We finished the field work last week, $587\ 00:40:39.810 \longrightarrow 00:40:43.980$ so we are just starting cleaning the database $588\ 00:40:43.980 \longrightarrow 00:40:46.770$ and preparing it for analysis. $589\ 00:40:46.770 - 00:40:49.470$ We will have the results in a few months, $590\ 00:40:49.470 - 00:40:53.599$ so we can share those results with you, $591\ 00:40:53.599 \longrightarrow 00:40:58.599$ but what I'd like to share here, $592\ 00:41:00.540 \longrightarrow 00:41:02.217$ in terms of the control group $593\ 00:41:02.217 \rightarrow 00:41:04.590$ and how to approach the control group, 594 00:41:04.590 --> 00:41:09.450 is based on our learnings from Argentina, $595\ 00:41:09.450 \longrightarrow 00:41:12.420$ from the design phase of the study $596\ 00:41:12.420 \longrightarrow 00:41:16.200$ planned for different evaluations, $597\ 00:41:16.200 \longrightarrow 00:41:19.857$ not only of the control arm of the trial, 598 00:41:19.857 $\rightarrow 00:41:24.857$ but also on other clinical posts and centers $599\ 00:41:25.380 \longrightarrow 00:41:27.510$ that were not included in the study, $600\ 00:41:27.510 -> 00:41:32.510$ so I hope we have more data to evaluate this usual care $601\ 00:41:32.976 \longrightarrow 00:41:35.059$ at the end of this study. $602\ 00:41:36.030 \longrightarrow 00:41:38.790$ And this has also budget implications. $603\ 00:41:38.790 \longrightarrow 00:41:40.260$ So for us researchers. $604\ 00:41:40.260 \rightarrow 00:41:42.540$ it is important to have that in mind 605 00:41:42.540 --> 00:41:43.630 and plan in advance, 606 00:41:44.910 --> 00:41:47.730 because it's different, it's really difficult, 607 00:41:47.730 --> 00:41:49.620 in particular if, 608 00:41:49.620 --> 00:41:54.093 as it happens in Guatemala and in many other countries. $609\ 00:41:55.410 \longrightarrow 00:41:58.317$ information is not so easily obtained, $610\ 00:41:58.317 \rightarrow 00:42:02.850$ and it's not so easy to access this information

 $611\ 00:42:02.850 \longrightarrow 00:42:04.380$ from other centers.

 $612\ 00:42:04.380 \longrightarrow 00:42:07.537$ So there is a lot of work there as well.

613 00:42:07.537 --> 00:42:12.537 So that's what I'd like to share with you

 $614\ 00:42:14.760 \longrightarrow 00:42:17.730$ and to put on the table, you know?

615 00:42:17.730 --> 00:42:22.730 What can we do as researchers to improve our study

616 00:42:23.349 --> 00:42:24.182 and evaluation of the so-called usual care in our studies.

617 00:42:30.424 --> 00:42:31.753 Yes? <v ->That was a wonderful talk.</v>

618 00:42:31.753 --> 00:42:35.130 You talked a little bit with the first study in Argentina

619 00:42:35.130 --> 00:42:36.660 about some of your hypotheses

 $620\ 00:42:36.660 \rightarrow 00:42:38.730$ about the improvement in the control group

 $621\ 00{:}42{:}38.730$ --> $00{:}42{:}42.210$ with regards to these individuals making house visits.

 $622\ 00{:}42{:}42{.}210$ --> $00{:}42{:}46{.}050$ I was also interested in to what degree, in either study,

 $623\ 00:42:46.050 \longrightarrow 00:42:48.630$ there might be cluster-level differences

62400:42:48.630 --> 00:42:52.020 between the different clinics that you're randomizing,

 $625\ 00{:}42{:}52.020$ --> $00{:}42{:}56.100$ and whether you account for those when you do randomization,

 $626\ 00{:}42{:}56.100$ --> $00{:}42{:}59.403$ say by stratified randomization or restricted randomization,

 $627\ 00:43:01.470 \longrightarrow 00:43:02.730$ if you think those factors

62800:43:02.730 --> 00:43:07.730 might lead to systematic differences between the two groups?

629 00:43:07.980 --> 00:43:09.630 That's something that I've struggled a lot with

 $630\ 00{:}43{:}09{.}630$ --> $00{:}43{:}12{.}053$ in my research and I'm curious how you think about it.

631 00:43:13.290 --> 00:43:14.520 <v -> That's a great question.</v>

 $632\ 00:43:14.520 \longrightarrow 00:43:16.723$ We struggled (laughs) a lot as well.

 $633\ 00:43:16.723 \longrightarrow 00:43:20.790$ We have eligibility criteria for the individuals,

634 00:43:20.790 --> 00:43:23.250 I showed you those criteria,

635 00:43:23.250 --> 00:43:26.276 but also for the clinics, trying to, you know,

636 00:43:26.276 --> 00:43:28.110 have a set of...

637 00:43:28.110 --> 00:43:32.010 I mean, trying to reduce variability between the clinics

 $638\ 00:43:32.010 \longrightarrow 00:43:35.670$ that we invited to participate in the study.

 $639\ 00:43:35.670 \longrightarrow 00:43:37.563$ So that was one thing,

640 00:43:38.730 --> 00:43:42.243 in terms of resources, size, et cetera.

641 00:43:43.530 --> 00:43:47.536 The other thing is that we live in a federal country,

 $642\ 00{:}43{:}47.536$ --> $00{:}43{:}50.253$ so each province in our country, in Argentina,

 $643\ 00:43:51.750 \longrightarrow 00:43:56.743$ has their own rules, regulations

644 00:43:57.797 --> 00:44:02.137 and let's say, organization of the healthcare system.

645 00:44:03.210 --> 00:44:06.047 So yeah, we were working with several provinces

64600:44:06.047 --> 00:44:09.830 in the country, so we stratified by province, for example,

647 00:44:09.830 --> 00:44:12.870 to take into account that,

 $648\ 00:44:12.870 \longrightarrow 00:44:15.537$ to try to adjust for that variable.

649 00:44:17.716 --> 00:44:22.049 And there was no other stratification in this trial.

 $650\ 00:44:23.100 \longrightarrow 00:44:26.536$ We tried to manage variability

 $651\ 00:44:26.536$ --> 00:44:31.230 through this eligibility criteria, in terms of...

652 00:44:31.230 --> 00:44:33.390 I don't remember exactly,

 $653\ 00:44:33.390 \longrightarrow 00:44:37.350$ I think it was three or four variables,

 $654\ 00:44:37.350 \longrightarrow 00:44:39.053$ factors we took into account.

655 00:44:39.053 --> 00:44:40.983 One was size of the clinic,

65600:44:44.688 --> 00:44:45.573 the composition of the primary care team in each clinic,

657 00:44:49.740 --> 00:44:53.280 not to mix, you know, maybe big clinics

 $658\ 00:44:53.280 \longrightarrow 00:44:56.010$ with a lot of personnel,

 $659\ 00:44:56.010 \longrightarrow 00:44:59.579$ versus other ones that were smaller,

 $660\ 00:44:59.579 \longrightarrow 00:45:02.523$ so we took that in account,

661 00:45:03.570 --> 00:45:08.570 provision of medication, because although medication

 $662\ 00:45:09.600 \longrightarrow 00:45:13.470$ is provided for free in our country,

 $663\ 00:45:13.470 \longrightarrow 00:45:17.790$ for people who has only public insurance,

664 00:45:17.790 --> 00:45:21.783 only public insurance and not other type of coverage,

665 00:45:22.964 --> 00:45:27.946 the quantity and delivery of medication is different

666 00:45:27.946 --> 00:45:32.946 from different clinics or districts within each product.

 $667\ 00:45:33.570 \longrightarrow 00:45:36.420$ So we took that in account as well.

668 00:45:36.420 --> 00:45:40.337 That was another way of trying to balance clinics

669 00:45:42.540 --> 00:45:44.610 before randomization.

 $670\ 00{:}45{:}45.668$ --> $00{:}45{:}48.985$ And after that, it was simple randomization of clinics,

 $671\ 00:45:48.985 \longrightarrow 00:45:52.590$ stratified by province and no more than that.

672 00:45:52.590 --> 00:45:55.110 But I agree with you, I agree with you.

673 00:45:55.110 --> 00:46:00.110 It may be for sure something that could have influence

 $674\ 00:46:02.611 \longrightarrow 00:46:05.528$ in these differences that we found.

675 00:46:08.504 --> 00:46:09.720 It's always difficult.

676 00:46:09.720 --> 00:46:11.250 In implementation research,

677 00:46:11.250 --> 00:46:12.983 you know that it's always difficult,

 $678\ 00:46:12.983 \longrightarrow 00:46:15.540$ this balance and this trade-off,

 $679\ 00:46:15.540 \longrightarrow 00:46:20.540$ between what is feasible and what we,

680 00:46:20.933 --> 00:46:25.535 from a design point of view, want for our trial.

681 00:46:25.535 --> 00:46:27.452 It's difficult, really.

682 00:46:28.470 --> 00:46:31.380 <v Donna>One suggestion on a statistical level</v>

 $683\ 00:46:31.380 \longrightarrow 00:46:34.710$ for this issue would be secondary analysis,

 $684\ 00:46:34.710 \longrightarrow 00:46:37.680$ where you control for baseline patient

 $685\ 00:46:37.680 \longrightarrow 00:46:40.380$ and clinical-level characteristics,

 $686\ 00:46:40.380 \longrightarrow 00:46:43.083$ and then see how that changes the contrast.

687 00:46:44.520 --> 00:46:46.170 <v ->That's a great subject.</v>

 $688\ 00:46:46.170 \longrightarrow 00:46:48.176$ Yes, we explore.

689 00:46:48.176 --> 00:46:50.734 <v ->Yeah, exactly.</v> <v ->We explored that,</v>

 $690\ 00:46:50.734 \longrightarrow 00:46:53.567$ and we didn't find any difference.

 $691\ 00:47:00.480 \longrightarrow 00:47:02.970$ We didn't have much data, you know,

 $692\ 00:47:02.970 \longrightarrow 00:47:04.420$ just in terms of the clinics,

 $693\ 00:47:06.180 \longrightarrow 00:47:09.450$ but we did exploration about that.

 $694\ 00:47:09.450 \longrightarrow 00:47:13.653$ We didn't find differences in the results.

695 00:47:18.570 --> 00:47:22.570 So that's something that I proposed to work on

696 00:47:22.570 --> 00:47:24.300 in the future.

697 00:47:24.300 --> 00:47:25.773 <v Donna>I'm curious, Vilma,</v>

 $698\,$ 00:47:28.140 --> 00:47:32.430 has the TREIN/HyTREC consortium discussed this issue at all?

699 00:47:32.430 --> 00:47:36.120 Have the other projects also seen the same sort of,

 $700\ 00:47:36.120 \longrightarrow 00:47:39.270$ maybe not necessarily in the same magnitude,

701 00:47:39.270 --> 00:47:43.860 but the direction of improvements in control groups?

702 00:47:43.860 --> 00:47:46.230 Like, was it a consortium-wide phenomena?

703 00:47:46.230 --> 00:47:47.063 Do we know?

704 00:47:48.300 --> 00:47:53.300 <v ->No, I don't know, but it hasn't been discussed yet.</v>

705 00:47:53.760 --> 00:47:57.210 We have a meeting in September, I think,

 $706\ 00:47:57.210 \longrightarrow 00:48:01.470$ and our idea is to share these results

 $707\ 00:48:01.470 \longrightarrow 00:48:03.330$ and see what is happening

 $708\ 00:48:03.330 \longrightarrow 00:48:05.667$ in other studies in the consortium,

 $709\ 00:48:05.667 \longrightarrow 00:48:08.013$ but it hasn't been discussed yet.

710 00:48:09.750 --> 00:48:12.510 <v Donna>I know we've seen a similar phenomena</v>

711 00:48:12.510 --> 00:48:14.610 in our work site intervention studies,

712 00:48:14.610 --> 00:48:17.130 where we're trying to improve food

713 00:48:17.130 --> 00:48:19.980 and physical activity environment at work sites,

 $714\ 00:48:19.980 \longrightarrow 00:48:23.040$ to reduce cardiometabolic risk,

715 $00:48:23.040 \rightarrow 00:48:26.446$ and then we find, just simply by screening

 $716\ 00:48:26.446 \longrightarrow 00:48:28.770$ and then waiting six months,

717 00:48:28.770 $\rightarrow 00:48:31.770$ we see big improvements in blood pressure

718 00:48:31.770 --> 00:48:35.370 and smaller ones in blood sugar and so forth,

719 00:48:35.370 --> 00:48:36.750 which I think has been seen.

 $720\ 00{:}48{:}36{.}750$ --> $00{:}48{:}40{.}170$ Like, screening itself is a public health intervention,

 $721\ 00:48:40.170 \longrightarrow 00:48:43.680$ but I've also read it's not a durable one,

722 00:48:43.680 --> 00:48:45.990 without additional supports.

723 00:48:45.990 --> 00:48:47.640 So you might see some additional...

724 00:48:47.640 --> 00:48:50.340 People may improve when they find out,

 $725\ 00:48:50.340 \longrightarrow 00:48:52.470$ but then, they'll go back, maybe,

 $726\ 00:48:52.470 \longrightarrow 00:48:54.120$ if we don't have these other things.

 $727\ 00:48:54.120 \longrightarrow 00:48:55.159$ So there's maybe short-term...

728 00:48:55.159 --> 00:48:59.730 Like, would the short-term improvements in the control group

729 00:48:59.730 --> 00:49:03.720 be sustainable, say for two years or five years,

 $730\ 00:49:03.720 \longrightarrow 00:49:05.190$ or would they start to go away,

 $731\ 00:49:05.190 \longrightarrow 00:49:07.290$ whereas the intervention group

732 00:49:07.290 --> 00:49:09.120 can maintain their improvements

 $733\ 00:49:09.120 \longrightarrow 00:49:12.390$ and maybe even continue to improve?

734 00:49:12.390 --> 00:49:13.230 <v ->I agree.</v>

 $735\ 00:49:13.230 \longrightarrow 00:49:16.440$ I fully agree and I think that...

736 00:49:16.440 --> 00:49:21.440 Actually, we prepare a proposal to measure sustainability

737 00:49:22.110 --> 00:49:26.241 of the resource in Argentina and we didn't make it,

738 00:49:26.241 --> 00:49:29.130 but I think that that's something

 $739\ 00:49:29.130 \longrightarrow 00:49:32.883$ to talk with funders about, you know?

740 00:49:33.840 \rightarrow 00:49:36.630 Because there is a lot of effort and resources

741 00:49:36.630 --> 00:49:40.560 put in each of these trials that we conduct,

 $742\ 00{:}49{:}40{.}560$ --> $00{:}49{:}45{.}560$ and we don't know, in general, what happened half the time.

743 00:49:46.770 --> 00:49:49.890 I have some data about this trial in particular,

744 00:49:49.890 --> 00:49:54.890 because this program was adopted by one of the provinces

745 $00:49:56.400 \rightarrow 00:50:00.694$ and it was scaled up through the province,

746 00:50:00.694 --> 00:50:04.083 one of the province that I showed in the first map.

747 00:50:05.370 --> 00:50:08.040 So I have data on that,

748 00:50:08.040 --> 00:50:12.993 and they are very, very successful.

749 00:50:14.070 --> 00:50:15.237 That's good data.

750 00:50:16.110 --> 00:50:19.387 The difference is not so big as in the trial,

 $751\ 00:50:19.387 \longrightarrow 00:50:22.220$ as usual, but they keep improving.

752 00:50:23.109 --> 00:50:25.617 I don't know what happens in the other provinces,

753 00:50:25.617 --> 00:50:28.620 but I think that's something that would be really great

754 00:50:28.620 --> 00:50:30.180 if we can do that.

755 00:50:30.180 --> 00:50:31.838 In terms of the time,

756 00:50:31.838 --> 00:50:35.250 I mean, the timeline of our project,

 $757\ 00:50:35.250 \longrightarrow 00:50:38.190$ in general, we cannot do that.

758 00:50:38.190 --> 00:50:43.190 So it's time budget, but I think it would be great

 $759\ 00:50:44.622 \longrightarrow 00:50:47.490$ if, really, it's possible now,

 $760\ 00:50:47.490 \longrightarrow 00:50:49.473$ to see what happened with these.

761 00:50:51.000 --> 00:50:53.640 These programs, these projects,

762 00:50:53.640 --> 00:50:56.910 are adopted by the government.

763 00:50:56.910 --> 00:51:01.320 You have data afterwards, but if not,

764 00:51:01.320 --> 00:51:05.193 in general, it's difficult to know what happened.

765 00:51:08.688 --> 00:51:11.588 <v Donna>How did the randomization work out in Guatemala?</v>

766 00:51:12.720 --> 00:51:15.180 <v -> In terms of the clinic?</v> <v -> Of the balance?</v>

767 00:51:15.180 --> 00:51:18.929 Yeah, like, in table one, like you showed us-

768 00:51:18.929 --> 00:51:19.893 <v ->Yeah.</v> <v ->And did you</v>

769 00:51:19.893 --> 00:51:21.810 have significant differences between-

770 00:51:21.810 --> 00:51:22.643 <v ->No.</v> <v ->Oh, good.</v>

771 00:51:22.643 --> 00:51:24.427 <v ->No, it was better. (laughs)</v>

772 00:51:24.427 --> 00:51:25.893 In that sense, it was better. (Donna laughing)

773 00:51:25.893 --> 00:51:27.930 Yeah, it was more balanced.
 <v ->Uhhuh.</v>

774 00:51:27.930 --> 00:51:30.134 <v ->Yeah, and I don't have the table now,</v>

 $775\ 00:51:30.134 \longrightarrow 00:51:32.117$ but in Guatemala, it was more balanced.

776 00:51:32.117 --> 00:51:33.060 <v Donna>Uh-huh.</v>

777 00:51:33.060 --> 00:51:33.893 <v ->Yeah.</v>

778 00:51:36.150 --> 00:51:37.920 <v Donna>So I'm monitoring the chat, </v>

 $779\ 00:51:37.920 \rightarrow 00:51:40.933$ and it seems that people are being a little shy.

780 00:51:40.933 --> 00:51:42.486 <v ->Oh, I have another question.</v> <v ->Oh, good.</v>

781 00:51:42.486 --> 00:51:43.380 (attendees laughing) I have some too,

 $782\ 00:51:43.380 -> 00:51:46.193$ but I didn't wanna hog the whole discussion.

783 00:51:46.193 --> 00:51:48.990 <v Attendee>So do you know to what degree</v>

784 00:51:48.990 --> 00:51:51.780 the interventions worked in the intervention arm?

785 00:51:51.780 --> 00:51:56.780 Because I'm just wondering, A, how successful they were,

786 00:51:57.270 --> 00:51:58.680 or B, if there were other factors

787 00:51:58.680 $\rightarrow 00:52:00.420$ that restricted the ability to improve?

788 00:52:00.420 --> 00:52:04.290 For example, you were mentioning about a lack of medications

789 00:52:04.290 --> 00:52:05.490 in the health facilities.

790 $00{:}52{:}05{.}490 \dashrightarrow 00{:}52{:}07{.}350$ I can imagine that no matter what you do

791 00:52:07.350 --> 00:52:09.060 with all those interventions, if there aren't drugs,

 $792\ 00:52:09.060 \longrightarrow 00:52:11.220$ things might not get better.

793 00:52:11.220 --> 00:52:13.470 Do you have any information on the fidelity, basically,

 $794\ 00:52:13.470 \longrightarrow 00:52:14.790$ of the intervention,

79500:52:14.790 --> 00:52:18.000 or factors that might have impeded the fidelity?

796 00:52:18.000 --> 00:52:19.580 <v ->Yes, we have...</v>

797 00:52:22.423 --> 00:52:26.727 We have quite a lot of information from the Argentina trial.

798 00:52:28.170 --> 00:52:30.480 But there is something I would like to comment

799 00:52:30.480 $\rightarrow 00:52:33.217$ connected with your question in Guatemala.

 $800\ 00:52:34.072 \longrightarrow 00:52:39.072$ In Guatemala, the Ministry of Health

 $801\ 00:52:39.180 \longrightarrow 00:52:41.940$ was part of the trial, of the project,

 $802\ 00:52:41.940 \longrightarrow 00:52:44.070$ from the very beginning.

 $803\ 00{:}52{:}44.070$ --> $00{:}52{:}47.900$ They were involved in the design of the intervention,

 $804\ 00:52:47.900 \longrightarrow 00:52:49.950$ in the monitoring of the intervention,

 $805\ 00:52:49.950 \longrightarrow 00:52:52.683$ so they were very much involved.

 $806\ 00:52:53.910 \longrightarrow 00:52:58.582$ And they committed themself to assure

 $807\ 00{:}52{:}58{.}582 \dashrightarrow 00{:}53{:}03{.}582$ that there would be medication at the health posts

80800:53:06.782 --> 00:53:11.087 at least during the trial or duration of the trial.

 $809\ 00:53:11.087 \longrightarrow 00:53:13.078$ And they did it.

 $810\ 00:53:13.078 \longrightarrow 00:53:14.729$ With some periods, you know,

 $811\ 00:53:14.729 \longrightarrow 00:53:17.600$ that they have problems, limitations,

812 00:53:17.600 --> 00:53:21.130 shortage of medication, but they did it,

 $813\ 00:53:21.130 \longrightarrow 00:53:25.110$ and they work a lot to provide medication

814 00:53:25.110 --> 00:53:30.110 and to prioritize these centers, part of the study,

 $815\ 00:53:30.360 \longrightarrow 00:53:32.753$ in the provision of medication.

 $816\ 00:53:34.620 \longrightarrow 00:53:37.890$ So something that we...

817 00:53:37.890 --> 00:53:42.890 Again, I don't have the data to talk about,

 $818\ 00:53:44.546 \longrightarrow 00:53:49.546$ but we know that there was improvement

 $819\ 00:53:51.780 \longrightarrow 00:53:53.490$ in both arms in Guatemala,

 $820\ 00{:}53{:}53{.}490$ --> $00{:}53{:}56{.}403$ something similar to what happened in Argentina,

 $821\ 00:53:57.570 \longrightarrow 00:54:00.000$ and through qualitative interviews,

 $822\ 00:54:00.000 \rightarrow 00:54:03.080$ we understood that people was really very...

 $823\ 00:54:06.810 \longrightarrow 00:54:09.284$ I mean, they felt very well,

82400:54:09.284 --> 00:54:14.040 because they noticed that there were medication

 $825\ 00:54:14.040 \longrightarrow 00:54:16.873$ at the centers, where in the past,

 $826\ 00{:}54{:}17.820$ --> $00{:}54{:}22.140$ may be they have much more problem to get those medicines.

 $827\ 00{:}54{:}22.140$ --> $00{:}54{:}25.180$ That's something that all the participants said.

828 00:54:27.284 --> 00:54:31.034 So a very basic thing like having medication, 829 00:54:31.950 --> 00:54:33.930 access to medication, in the centers,

830 00:54:33.930 --> 00:54:38.930 that was something that was more or less assured

831 00:54:39.060 --> 00:54:40.773 in both arms of the study.

832 00:54:42.330 --> 00:54:47.330 But in our approach to the other centers in Guatemala,

833 00:54:47.383 --> 00:54:51.303 same district, same district, but not part of the study,

83400:54:52.506 --> 00:54:57.360 we are collecting information about medication,

835 00:54:57.360 --> 00:55:01.553 and the lack of medication is very important.

836 00:55:03.900 --> 00:55:06.099 There were serious problems,

837 00:55:06.099 --> 00:55:09.049 serious problems with the provision of medication

 $838\ 00:55:09.049 \rightarrow 00:55:13.530$ in all the other centers in the same district,

 $839\ 00:55:13.530 \longrightarrow 00:55:15.293$ different to the centers in the study.

840 00:55:20.520 --> 00:55:24.120 So that's something that if you cannot assure that,

841 00:55:24.120 --> 00:55:26.940 I mean, if you cannot provide medication,

842 00:55:26.940 --> 00:55:30.960 as you said, whatever you do with the other alternatives,

 $843\ 00:55:30.960 \longrightarrow 00:55:34.950$ that is just maybe useless.

844 00:55:34.950 --> 00:55:37.440 <
v Donna>And was this in Argentina you're talking about?</br/>/v>

845 00:55:37.440 --> 00:55:39.488 Or Guatemala? <v ->Guatemala.</v>

846 00:55:39.488 --> 00:55:42.630 <v ->Okay.</v> <v ->In this case, Guatemala.</v>

847 00:55:42.630 --> 00:55:47.000 In this case, Guatemala, because in the preparation phase,

 $848\ 00:55:47.000 \longrightarrow 00:55:49.980$ in the pre-implementation phase of the study,

849 $00{:}55{:}49{.}980 \dashrightarrow 00{:}55{:}54{.}030$ we did a lot of research about what is happening

 $850\ 00:55:54.030 \longrightarrow 00:55:57.537$ with the availability of drugs in the centers,

 $851\ 00{:}55{:}57{.}537$ --> $00{:}56{:}00{.}960$ and we found that there were big problems there.

 $852\ 00:56:00.960 \longrightarrow 00:56:04.170$ So we talk with the Ministry of Health,

 $853\ 00{:}56{:}04.170$ --> $00{:}56{:}09.170$ they committed to work on that for these centers,

 $854\ 00:56:09.540 \longrightarrow 00:56:11.613$ for these clinics, and they did.

85500:56:12.870 --> 00:56:17.697 But the rest, again, the usual care in reality in Guatemala

856 00:56:19.898 --> 00:56:20.820 was different.

857 00:56:20.820 --> 00:56:23.750 I don't know how much impact this will have

 $858\ 00:56:23.750 \longrightarrow 00:56:25.323$ on this trial yet.

 $859\ 00:56:26.474 \longrightarrow 00:56:28.410$ But it happened there.

860 00:56:28.410 --> 00:56:29.610 <v Donna>So Vilma, we've gotten...</v>

861 00:56:29.610 --> 00:56:32.220 It's like three questions now on the chat,

 $862\ 00:56:32.220 \longrightarrow 00:56:35.250$ and we only have two or three minutes,

863 00:56:35.250 --> 00:56:36.770 so what I thought I might do

 $864\ 00:56:36.770 \longrightarrow 00:56:39.270$ is just ask all of them in four minutes,

865 00:56:39.270 --> 00:56:41.280 I'd ask all of the questions,

 $866\ 00{:}56{:}41.280$ --> $00{:}56{:}44.160$ and maybe you can just try to address them together?

867 00:56:44.160 --> 00:56:49.057 <v ->Yes.</v> <v ->So John Roman asked,</v>

 $868\ 00:56:49.057 \longrightarrow 00:56:50.760$ "Was there any incentives given

 $869\ 00:56:50.760 \rightarrow 00:56:52.950$ to either participants or care providers?"

 $870\ 00:56:52.950 \longrightarrow 00:56:55.209$ I think he means financial incentives-

871 00:56:55.209 --> 00:56:57.545 <v ->No, (laughs) a short question.</v>

872 00:56:57.545 --> 00:56:59.790 <v ->Okay, good-</v> <v ->A short answer. (laughs)</v>

873 00:56:59.790 --> 00:57:01.717 <
v Donna>Oh, Raphael Perez Escamilla asked,
/
v>

874 00:57:01.717 --> 00:57:05.070 "Was text messaging used in Argentina and Guatemala

 $875\ 00:57:05.070 \longrightarrow 00:57:06.330$ as part of the intervention?

876 00:57:06.330 --> 00:57:07.770 If so, was it helpful?"

 $877\ 00{:}57{:}07{.}770$ --> $00{:}57{:}09{.}960$ You've actually addressed that a little bit,

 $878\ 00:57:09.960 \longrightarrow 00:57:12.030$ but maybe if there was data on...

879 00:57:12.030 --> 00:57:14.820 So Raphael, it wasn't used in Guatemala,

 $880\ 00:57:14.820 \longrightarrow 00:57:16.920$ because of the literacy issues,

881 00:57:16.920 --> 00:57:18.750 but in Argentina it was used,

882 00:57:18.750 --> 00:57:20.070 and I don't know, Vilma,

883 00:57:20.070 --> 00:57:23.760 if there was any way to independently look at that component

884 00:57:23.760 --> 00:57:25.230 to see how helpful it was,

 $885\ 00{:}57{:}25{.}230$ --> $00{:}57{:}29{.}220$ compared to all these other complex components?

886 00:57:29.220 --> 00:57:31.770 < v -> No, it's difficult to separate </v>

887 00:57:31.770 --> 00:57:34.890 and to analyze independently the contribution.

888 00:57:34.890 --> 00:57:37.230 But there was a high correlation

889 $00:57:37.230 \dashrightarrow 00:57:40.890$ with the dose received of text messages

 $890\ 00:57:40.890 \longrightarrow 00:57:42.320$ and the blood pressure control.

891 00:57:42.320 --> 00:57:45.000 <v ->Okay.</v> <v ->Okay, so that's something</v>

 $892\ 00:57:45.000 \longrightarrow 00:57:46.500$ that can be interpreted

 $893\ 00:57:46.500 \longrightarrow 00:57:51.097$ as these were a useful part of the intervention.

894 00:57:52.546 --> 00:57:53.379 <v Donna>Oh, good.</v>

895 00:57:53.379 --> 00:57:55.207 And then Anna Julio asked,

 $896\ 00:57:55.207 \longrightarrow 00:57:57.840$ "How sustainable is the intervention?"

 $897\ 00{:}57{:}57{.}840$ --> $00{:}58{:}00{.}750$ Was it adopted by the Ministry of Health in total?

89800:58:00.750 --> 00:58:03.990 Besides the medications, the mHealth component?"

 $899\ 00:58:03.990 \longrightarrow 00:58:06.030$ So I think you've discussed that a little bit

900 00:58:06.030 --> 00:58:10.590 maybe about Guatemala, but not so much for Argentina.

901 00:58:10.590 --> 00:58:12.900 <v ->In Argentina, the intervention was adopted </v>

 $902\ 00:58:12.900 \longrightarrow 00:58:14.280$ by only one province.

903 00:58:14.280 --> 00:58:16.163 <v Donna>Oh, that's right, you did say that.</v>

904 00:58:18.540 --> 00:58:19.800 <v ->And it's working. (laughs)</v>

905 00:58:19.800 --> 00:58:21.510 It's working, you know?

 $906\ 00:58:21.510 \longrightarrow 00:58:23.910$ But not in the other provinces.

907 00:58:23.910 --> 00:58:28.910 And shortly, this is the base for the HEARTS initiative.

908 00:58:29.220 --> 00:58:31.397 The HEARTS Initiative in the Americas,

 $909\ 00:58:31.397 \longrightarrow 00:58:34.110$ in the case of Argentina,

 $910\ 00:58:34.110 \longrightarrow 00:58:36.420$ was built on this intervention.

911 00:58:36.420 --> 00:58:40.230 So we could contribute, you know,

912 00:58:40.230 \rightarrow 00:58:42.330 with many implementation indicators

913 00:58:42.330 $\operatorname{-->}$ 00:58:45.660 for them to implement the initiative.

914 00:58:45.660 --> 00:58:46.943 That's something, not much, but something.

915 00:58:48.857 --> 00:58:51.180 <v Donna>Vilma, maybe like in your remaining few minutes</v>

916 00:58:51.180 --> 00:58:53.867 you could say a little bit more about the HEARTS Initiative,

917 00:58:53.867 --> 00:58:56.130 'cause a number of us, myself included,

 $918\ 00:58:56.130 \longrightarrow 00:58:58.350$ are not that familiar with it?

919 00:58:58.350 --> 00:59:01.667 <v ->The HEARTS Initiative is a platform initiative
/v>

920 00:59:01.667 --> 00:59:02.867 for the Americas.

921 00:59:02.867 --> 00:59:04.350 There are 12 countries

922 00:59:04.350 \rightarrow 00:59:07.710 that adopted the HEARTS Initiative

 $923\ 00:59:07.710 \longrightarrow 00:59:11.760$ directed to better control hypertension,

 $924\ 00{:}59{:}11.760$ --> $00{:}59{:}16.410$ and HEARTS is based on a team-based approach protocol

 $925\ 00:59:16.410 \longrightarrow 00:59:20.580$ for clinical practice guidelines in the country,

926 00:59:20.580 --> 00:59:22.440 measuring cardiovascular risk

927 00:59:22.440 --> 00:59:27.300 as part of the management of patients with hypertension

 $928\ 00:59:27.300 \longrightarrow 00:59:30.810$ and providing free access to medication,

929 00:59:30.810 --> 00:59:34.590 in particular, fixed-dose combinations,

 $930\ 00:59:34.590 \longrightarrow 00:59:37.500$ which are supposed to improve adherence,

931 00:59:37.500 --> 00:59:41.430 because these people had and have comorbidities

 $932\ 00:59:41.430 \longrightarrow 00:59:44.400$ and sometimes have to take many medications,

933 00:59:44.400 --> 00:59:49.400 so these fixed-dose combinations are an alternative.

934 00:59:49.678 --> 00:59:53.541 Those are the components of the HEARTS Initiative

935 00:59:53.541 --> 00:59:56.949 in the Americas, and we have 12 countries at the moment

936 00:59:56.949 --> 00:59:59.160 as part the initiative.

937 00:59:59.160 --> 01:00:02.289 <v Donna>And who's paying for all these medications?</v>

938 01:00:02.289 --> 01:00:03.400 <v ->Each government.</v>

939 01:00:03.400 --> 01:00:04.380 I mean, each government.

940 01:00:04.380 --> 01:00:06.360 They don't receive...

941 01:00:06.360 --> 01:00:10.053 Countries don't receive any financial support.

942 01:00:10.968 --> 01:00:14.468 Technical support, yes, but not financial.

943 01:00:17.050 --> 01:00:19.380 <v Donna>Okay, well, it is 13:00,</v>

944 01:00:19.380 \rightarrow 01:00:22.680 so this was an incredibly interesting talk.

945 01:00:22.680 --> 01:00:25.170 I would've loved to have asked more about equity,

946 $01:00:25.170 \rightarrow 01:00:27.090$ which is a very hot topic around here

947 01:00:27.090 --> 01:00:29.910 at the Yale School of Public Health and elsewhere,

948 01:00:29.910 --> 01:00:32.790 but maybe we can save that for another time.

949 01:00:32.790 --> 01:00:34.200 And thank you so much, Vilma,

950 01:00:34.200 --> 01:00:39.200 for coming and providing such a mazing information.

951 01:00:40.358 --> 01:00:41.874 <v ->Thank you very much.</v>

952 01:00:41.874 --> 01:00:44.870 Thank you very much for giving me the opportunity.

953 01:00:44.870 --> 01:00:46.786 <v ->Yeah.</v> <v ->You are like a star.</v>

954 01:00:46.786 --> 01:00:48.545 (attendees laughing) $\langle v \rangle$ ->Thank you. $\langle v \rangle$ 955 01:00:48.545 --> 01:00:51.795 (attendees chattering)

555 01.00.40.545 -> 01.00.51.155 (attendees chattering)

956 01:00:53.920 --> 01:00:55.050 <v Luke>Hey, how's it going, I'm Luke Davis.</v>

957 01:00:55.050 --> 01:00:56.333 <v Attendee 2>Hi, how are you?</v>