

M.H. SARKIO, T.A. ARVO, A.L. LYYTINEN, R.M. KARVINEN, E.H. SANDELIN. **Traditional group exercise and rehabilitation via synchronous teletechnology enables new service concepts in home care.** *Gerontechnology* 2016;15(suppl):161s; doi:10.4017/gt.2016.15.s.872.00 **Purpose** Working together to develop services and technology, and at the same time taking into account how capable elderly clients are (in terms of vision, hearing, cognition, motor function) of using technology^{1,2}, are essential. New operating models³ are required to meet the needs of the ageing population, to support their living at home, and to strengthen clients' ability to function. As a result of development work, a video and audio transmission service – called Contact Center – and the related support teams, are available 24/7 in Helsinki. There are currently 420 remote care clients, with 12,600 remote visits carried out each month. **Method** Descriptive analysis, featuring action research elements. Over the course of the year 41 clients (62-100 yrs old; 30 women, 11 men) took part in the rehabilitation project, and of those, 8 (72-95 yrs old; 6 women, 2 men) took part in the pilot. The group met once a week for a period of 10 weeks. Using a 21" tablet the instructor opened a secure 4G video connection to the remote clients' 11" tablets, joint initial discussion and warm-up, the physiotherapist instructed 6 gym clients and 2 remote clients in chair exercises, joint cool-down and closing discussion. The clients' physical performance was measured⁴ before and after the period. Clients were asked about the impact on their perceived ability to function and well-being⁵. **Results & Discussion** Results are so good –perceived well-being and measured performance improved, and social contact and peer support increased– that the model will be implemented throughout Helsinki during 2016. From May 2016 the image has been projected through a video projector, allowing the maximum number of remote participants/groups to grow from 4 to 9 (sufficiently large and high-quality image). Implementation of a virtual wall (HUB), which could allow for up to 20 clients at the same time, has been planned. Visit prices for 2015: remote visit €5, home care visit €38.41, remote rehabilitation €23, group rehabilitation €17, physiotherapist appointment €70 and home visit €108. Switching home visits made by car for remote visits reduced carbon dioxide emissions by approximately 30,000 kg (10,000 kg/month in 2016).

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Address: City of Helsinki Dept. of Social Service and Health Care, Helsinki, Finland;

E: maria.sarkio@hel.fi

Table 1. Summary score results (12 maximum) of short physical performance battery and hand grading (Jamar Dynamo meter, kg)

Participants & groups	2015		2016		Right 2015		2016		Left 2015		2016	
	March	May	May	May	March	May	May	March	May	May	March	May
1 Gym	5	9	7	16	14.5	21	13	12	11			
2 Gym	8	8	9	10	11.5	16.5	10	9	18			
3 Gym	4	5	Quit	27	31.5	-	24.5	24	-			
4 Gym	6	9	7	5	17.5	14	2	10	14			
5 Gym	5	8	9	17	13	19	17	13.5	20.5			
6 Gym	4	8	7	7.5	10	14	7	8	15			
7 Gym	4	0	7	19	-	22.5	12	-	17			
8 Virtual	8	12	11	21	27	25	18	23.5	16			
9 Virtual	5	12	6	16	20	20	16	16.5	17			