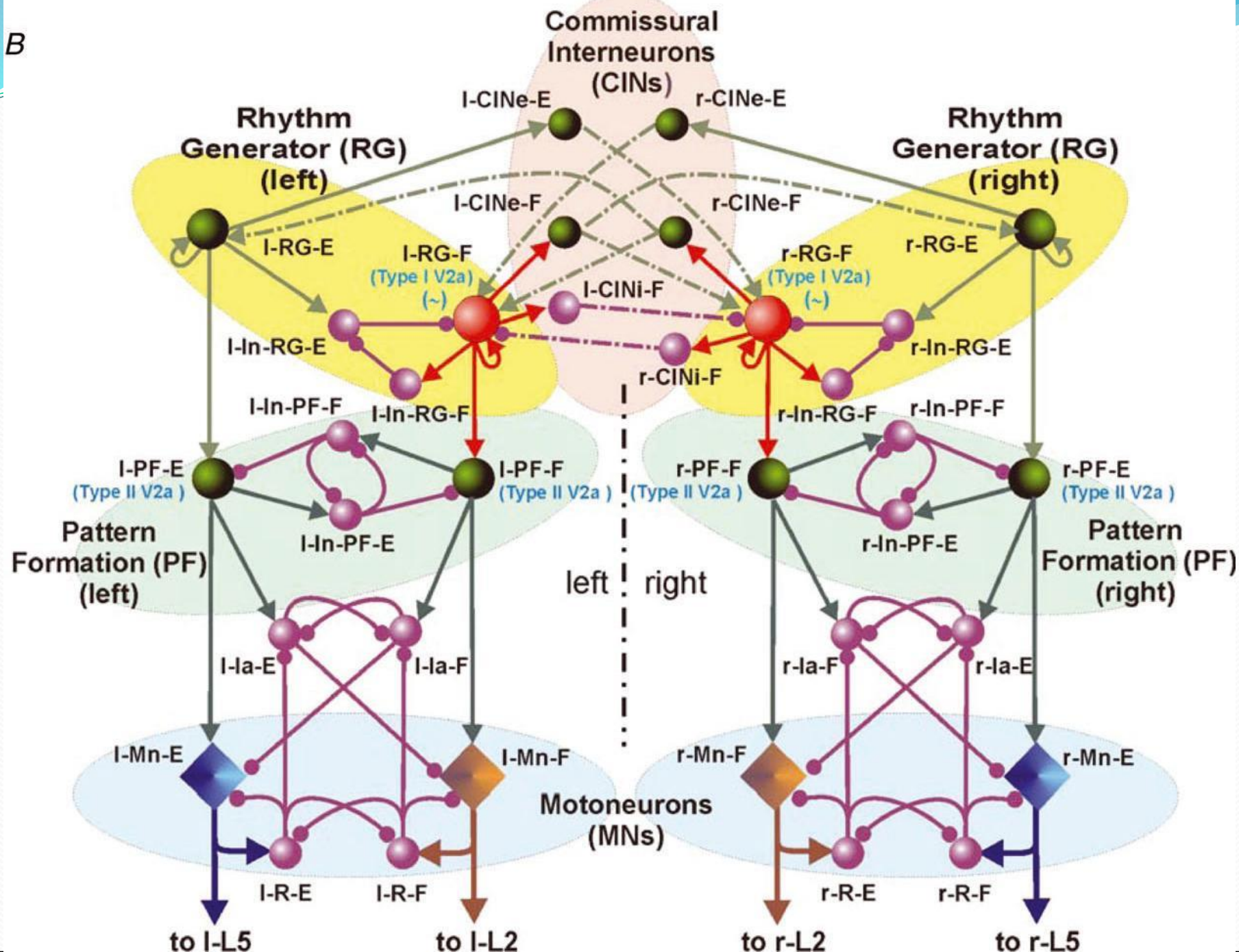


ARTIFICIAL INTELLIGENCE & Rehabilitation Medicine

Franco MOLTENI MD
H.Valduce Villa Beretta Rehabilitation Center
Costa Masnaga (Lecco)
National Council of Research STIIMA INSTITUTE
Milano-Lecco
ITALY



B



Ekso

Technical Features:

4 Electric Motors (2 hip, 2 knee)

2 Lithium Ion Batteries (48 V)

Height range: 150-190 cm

Maximum weight: 100 kg

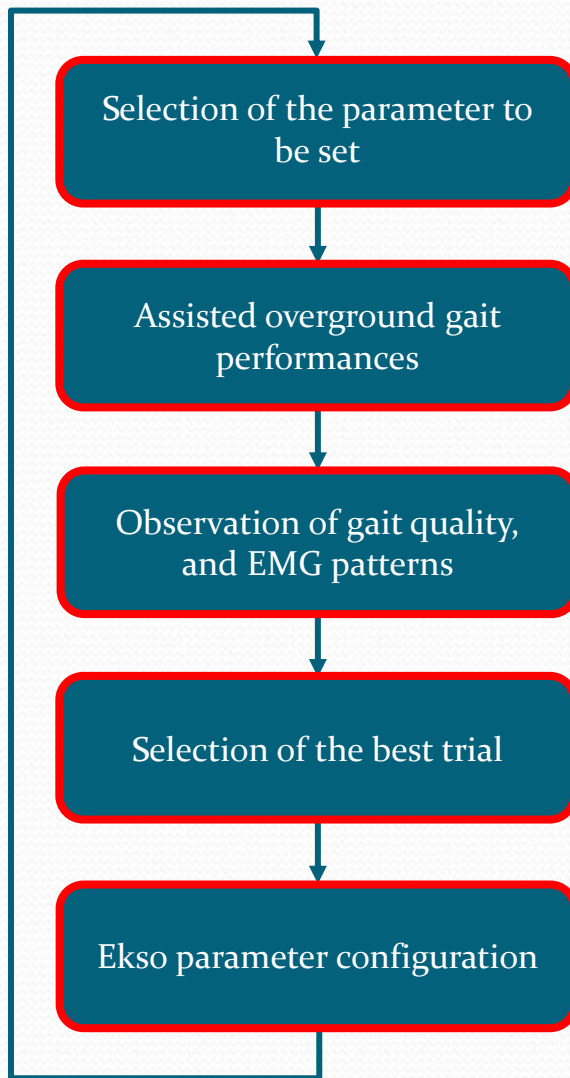
Maximum hip width: 46 cm

23 kg in Weight

Multiple sensors and  gyroscopes in the legs and torso to assist in balance and walking



Manual calibration procedure



PARAMETER 1: TRUNK OSCILLATION
PARAMETER 2: OSCILLATION VELOCITY
PARAMETER 3: SEMI-STEP LENGTH



1
0
-1



1.3
1.5
1.1



12
12.5
13

Overground gait trials

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Ekso parameters setting

0	1.1	12.5
---	-----	------



AUTOMATIC SETTING PROCEDURE for EXOSKELETON-ASSISTED OVERGROUND TRAINING: proof of concept on stroke population

**Gandolla M, Guanziroli E, D'Angelo A, Cannaviello G, Molteni F,
Pedrocchi A
Front Neurobot 2018**

KEEOGO



Additional components and accessories:

Extra battery (x1)



User Manual (x1)



Battery charger (x1)



Transportation kit (x1)

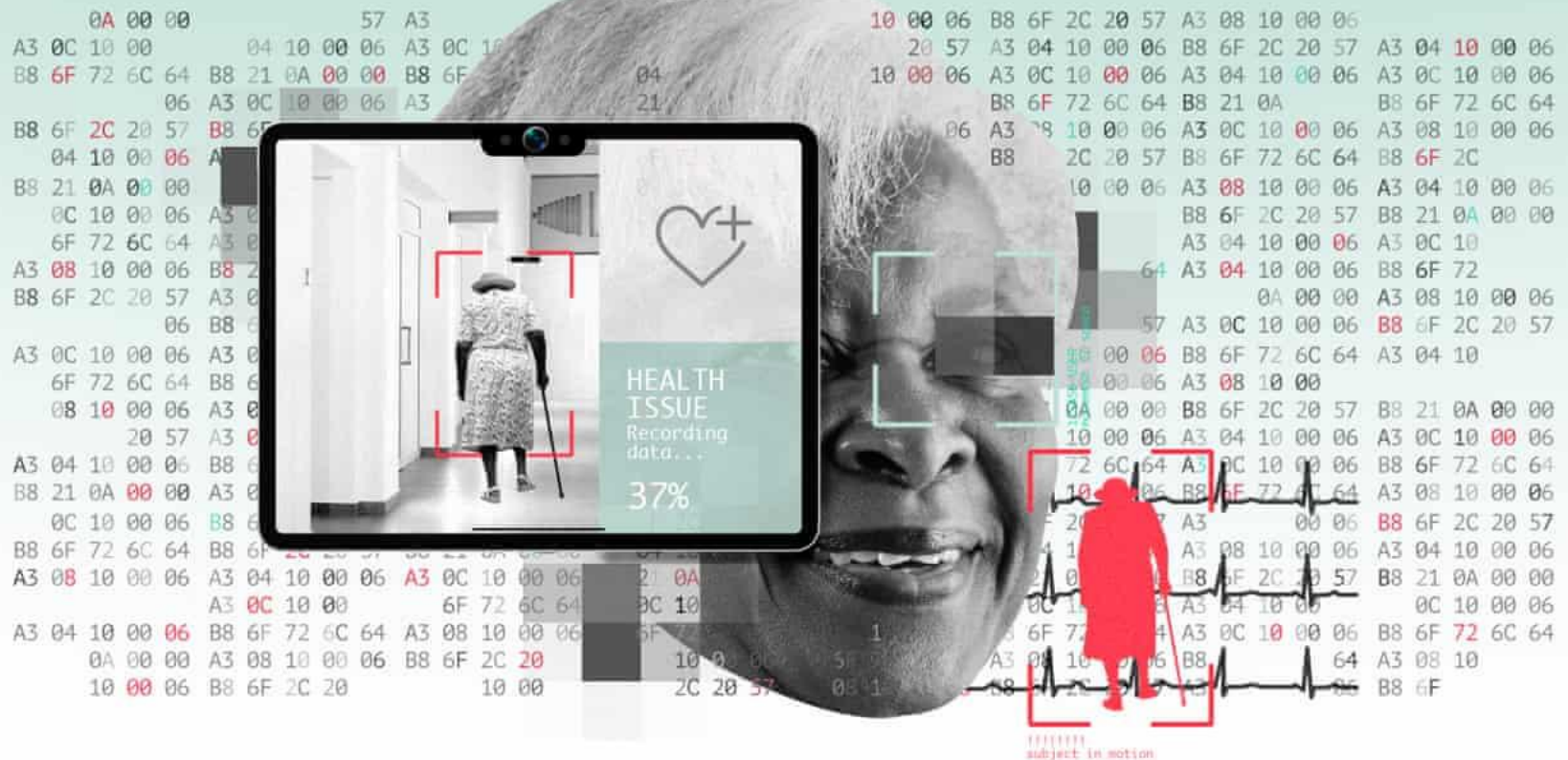


Charger power cord (x1)



Extra Lumbar Strap (x2)







 **movendo**
technology

Movendo launches AI to predict and prevent falls for seniors

Gargi Ketkar | Posted on [9 September 2020](#)



Movendo Technology, which develops robotics for rehabilitation, has launched the Silver Index, an AI-based algorithm that helps to predict and prevent the risk of falls for senior citizens. The technology is the result of a two-year research programme with 150 patients carried out in collaboration with Galliera Hospital in Genoa, Italy.



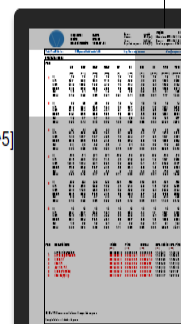
AUTONOMIC SYSTEM DYSFUNCTIONS

POST COVID



Fase

		HR	sBP	dBp	mBP	SV	SI	CO	CI	TPR	
		[bpm]	[mmHg]	[mmHg]	[mmHg]	[ml]	[ml/m ²]	[l/min]	[l/(min*m ²)]	[dyne*s/cm ⁵]	
1	N	72	72	72	72	72	72	72	72	72	
	Min	56.7	93.0	66.0	77.9	68	33.9	4.0	2.0	1296	
	Max	63.8	100.6	72.5	84.2	76	37.8	4.8	2.4	1588	
	Mean	60.6	97.3	68.9	80.9	72	35.9	4.4	2.2	1426	
	SD	1.5	2.1	1.7	1.8	2	0.9	0.2	0.1	61	
	SEM	0.18	0.25	0.20	0.21	0.21	0.11	0.02	0.01	7.17	
2	N	22	22	22	22	18	18	18	18	18	
	Min	59.2	93.8	66.5	78.4	60	29.7	3.8	1.9	1231	2479
	Max	63.3	96.8	69.3	80.1	81	40.4	5.0	2.5	1597	3215
	Mean	61.4	95.5	68.2	79.5	73	36.1	4.5	2.2	1381	2780
	SD	1.2	0.7	0.7	0.4	6	2.9	0.3	0.2	103	207
	SEM	0.26	0.14	0.16	0.08	1.39	0.69	0.08	0.04	24.20	48.73
3	N	34	34	34	34	33	33	33	33	33	33
	Min	63.3	89.5	68.5	76.3	51	25.5	3.4	1.7	1279	2575
	Max	74.0	102.7	79.7	88.5	70	34.8	4.7	2.3	1947	3921
	Mean	68.6	95.5	73.4	81.8	56	27.8	3.8	1.9	1658	3338
	SD	2.1	4.0	3.2	3.5	4	2.1	0.3	0.2	172	346
	SEM	0.36	0.69	0.54	0.60	0.75	0.37	0.05	0.03	29.95	60.32
4	N	373	371	371	371	372	372	372	372	370	370
	Min	53.5	83.0	61.4	71.3	43	21.5	2.4	1.2	1337	2693



Pagina 2 di 9

Commento

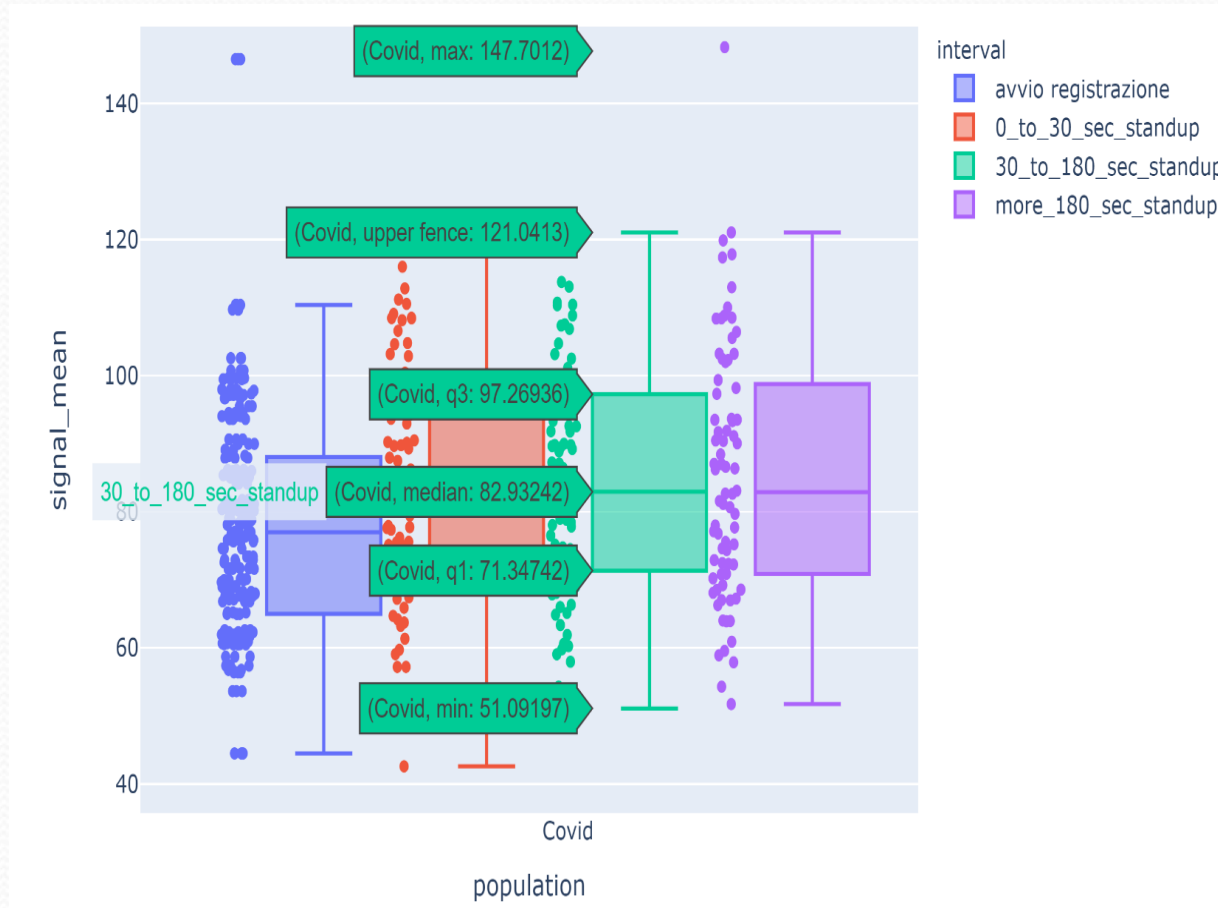
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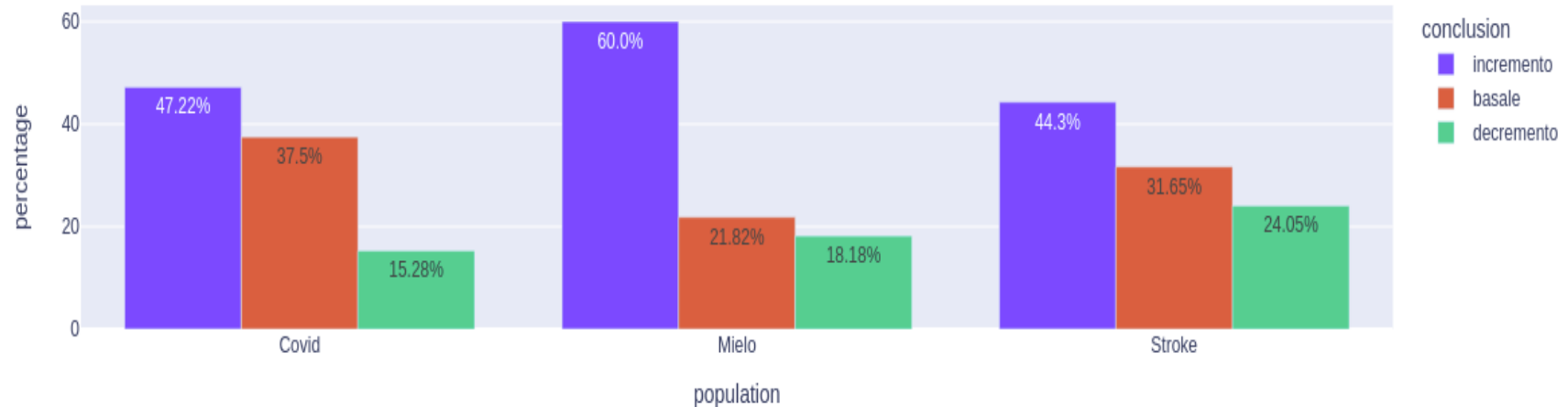
HR

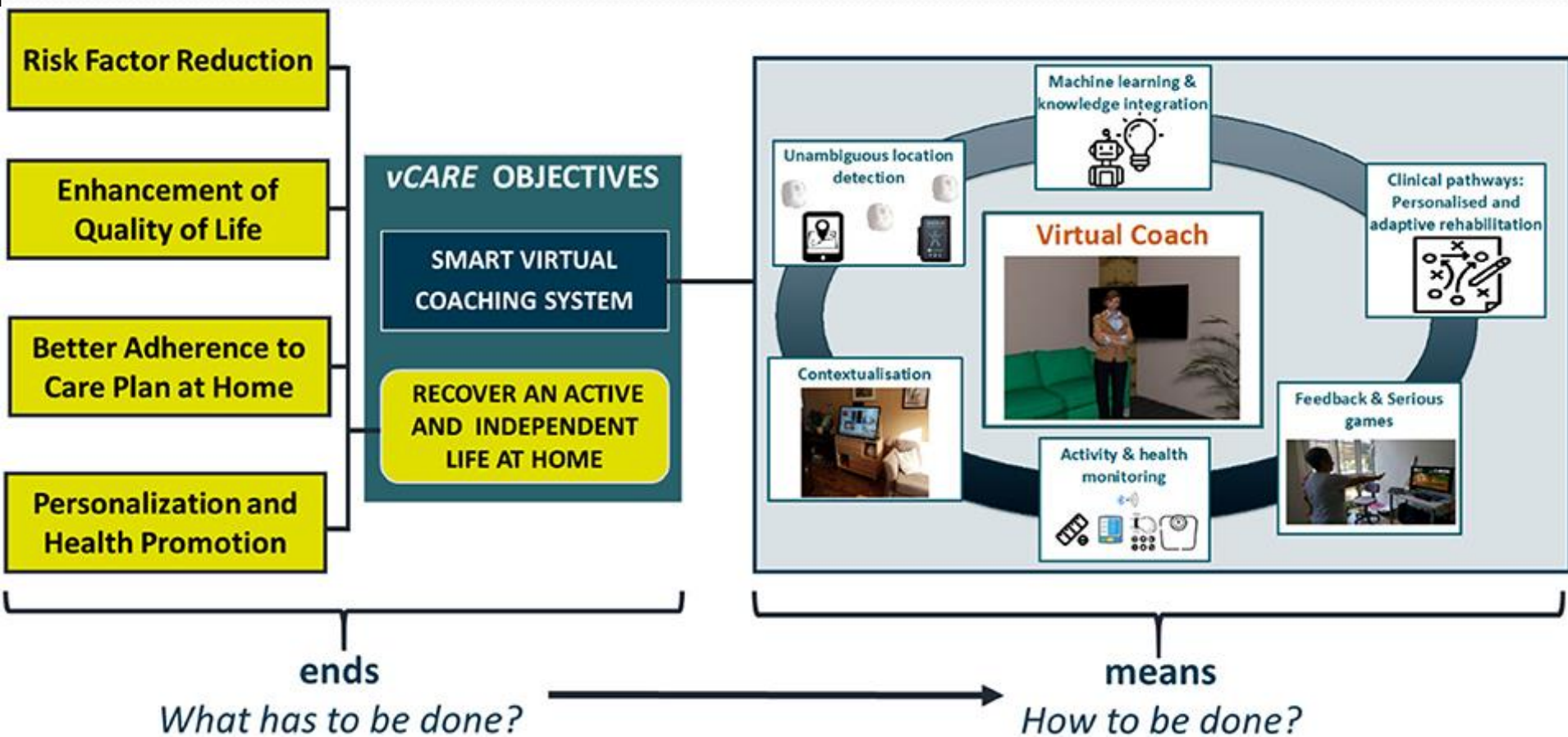


MENTAL STRESS TEST

Systolic Blood Pressure (sBP)

Calcolo
aritmetico

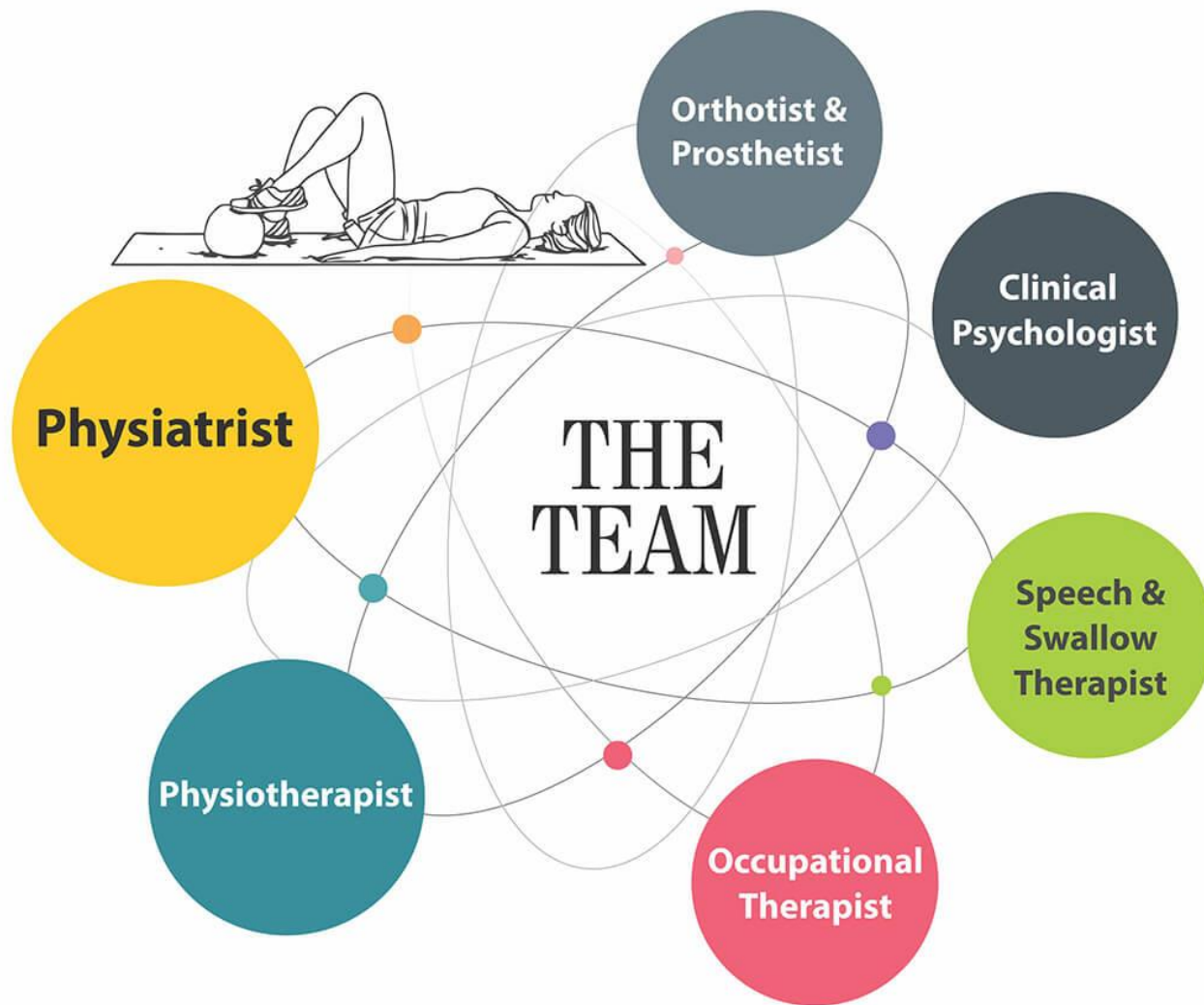






DATA MINING

DATA MEANING



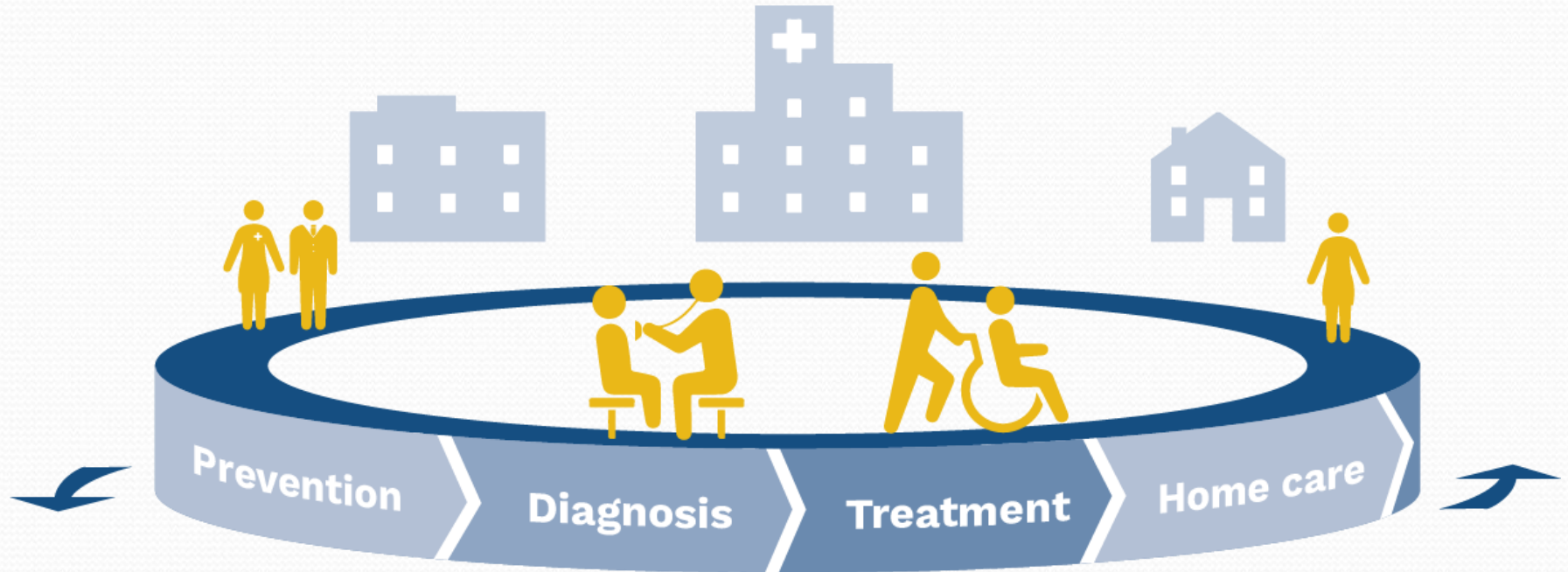
THE HEALTH CONTINUUM



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THEME 2: Oncology



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Support recovery and chronic care at home.



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