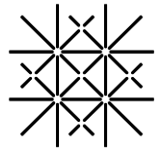




University of  
Zurich<sup>UZH</sup>



Universität  
Basel



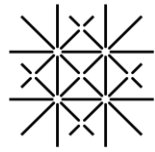
# Development of a screening tool «EPOCA\*»

to enhance the medical evaluation and managed care of patients with Post-Covid-19 conditions

**Tala Ballouz<sup>1</sup>, Pasquale Calabrese<sup>2</sup>, Milo Puhan<sup>2</sup>, Maurizio Trippolini<sup>3</sup>**

<sup>1</sup> University of Zurich; <sup>2</sup> University of Basel; <sup>3</sup> Bern University of Applied Sciences

\*Erfassungsbogen **Post-Covid Assessment**



## Aim

- Develop a convenient & reliable screening tool to inform and guide medical evaluation and management of patients with Post-Covid-19 conditions:
  - Assessment of the severity and impact of Post-Covid-19 condition
  - Facilitating the synopsis of collected findings
  - Standardization of the diagnostic workup
  - Guiding rehabilitation interventions

## Phases of tool development

### Guarantor:

Swiss Insurance Medicine (SIM), asim, University  
Basel

### Working group:

T. Ballouz, P. Calabrese, M. Puhan, M. Trippolini

Started in **December 2021**

Weekly meetings

### Development

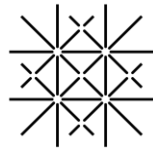
1. Identified dimensionality of the tool
  - Literature review of condition
  - Interviewed HCPs involved in Post-Covid-19 programs
2. Identified available instruments through literature review
3. Selected relevant instruments
4. Re-evaluated instruments based on completeness & understandability of items
5. Determined questionnaire & item format

### Evaluation

Pilot testing  
Patients & GPs

Translation  
FR & IT

Validation  
Rasch analysis/PCA



## Dimensions of the screening tool

### Baseline demographic & clinical

- Sociodemographics
- Medical comorbidities
- Smoking
- BMI
- Details on acute COVID-19 infection

### Occupational & insurer status

- Occupation/employment
- Mental/physical demands
- Perceived work restrictions
- Return to work expectations
- Work ability scale
- Insurer status

### Functioning status

- Ability to self-care
- Post-Covid Functional Scale (PCFS)

### Current health status

#### General/internal

- Symptoms
  - Current treatments
- 
- Feeling thermometer
  - Perceived recovery

#### Physical

- Fatigue Severity Scale (FSS)
- 1-min sit to stand (STS)

#### Respiratory

- Chronic Respiratory Questionnaire (CRQ)

#### Cognitive/Psych

- DemTect
- WHO-5 Wellbeing Index

# Use of the screening tool

Abschnitt	Fragestellung	Ausgefüllt von	Bereich
<b>Teil 1: Demographische und Klinische Hintergrundinformationen</b>			
1.A.	Demographie	Self-rep	SozDe
1.B.	Gesundheitszustand vor akuten Covid-19 Erkrankung	HCP	SozDe
1.C.	Details zur akuten Covid-19 Erkrankung	HCP	SozDe
<b>Teil 2: Arbeits- und Versicherungssituation</b>			
2.A.	Arbeitssituation	HCP	SozDe
2.B.	Einschätzung zur Arbeitsfähigkeit	Self-rep	VMED
2.C.	Erwartungen bezüglich Rückkehr zur Arbeit	Self-rep	VMED
2.D.	Versicherungssituation	HCP / Self-rep	VMED
<b>Teil 3: Funktionelle Einschränkungen</b>			
3.A.	Selbständigkeit, Möglichkeit, sich selbst zu versorgen	Self-rep	Gen
3.B.	Post-COVID-19 Functional Status (PCFS)		
<b>Teil 4: Symptome der Covid-19 Erkrankung &amp; Behandlung</b>			
4.A.	Liste Symptome/Beschwerden	HCP	Gen/Int
4.B.	Aktuelle Behandlung		
<b>Teil 5: Fragebögen</b>			
5.A.	Allgemeiner Gesundheitszustand	Self-rep	Gen/Int
5.B.	Wahrgenommene Genesung	Self-rep	Gen/Int
5.C.	Ermüdung: Fatigue Severity Scale	Self-rep	Phys
5.D.	Kraft/Ausdauer: 1. Minute Sitzen zu Stehen Test	HCP	Pulm
5.E.	Atemnot: CRQ-Fragebogen	Self-rep	Phys
5.F.	Kognitive Funktion: DemTect	HCP	Kog/Psy
5.G.	Psych. Wohlbefinden: Five Well-being index (WHO-5)	Self-rep	Kog/Psy

Teil 6: Empfehlung / weitere Massnahmen			
6.A.	Fachmedizinische Abklärung	HCP	VMED
6.B.	Rehamassnahme		
6.C.	Arbeitstraining		
6.D.	Wiederaufnahme Arbeit		
6.E.	anderes:		

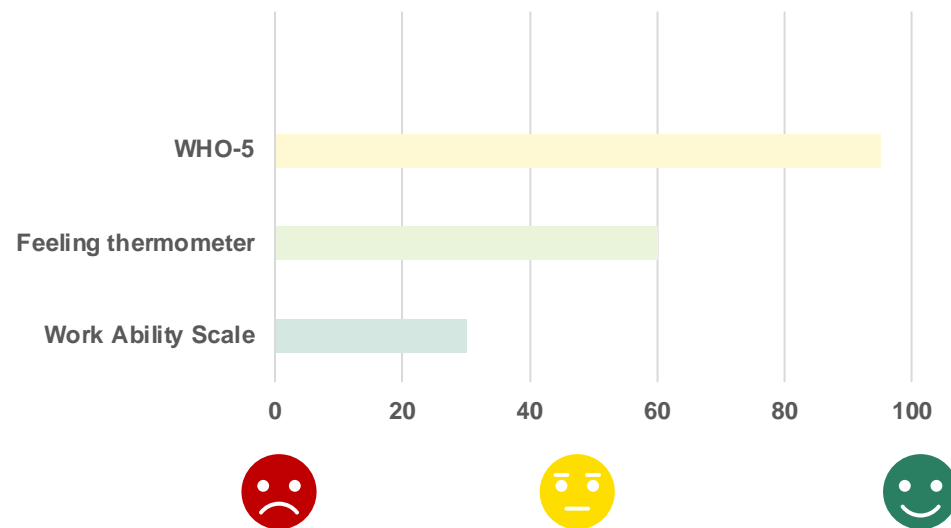
- HCP: Health Care Professional (Arzt)
- SozDem: Soziodemographisch
- Kog/Psy: Kognition/Psyche
- VMED: Versicherungsmedizin
- Gen/Int: Generell, Internistisch
- Pulm: Pulmonal
- Phys: Physisch

**Time needed 15-30 mins**

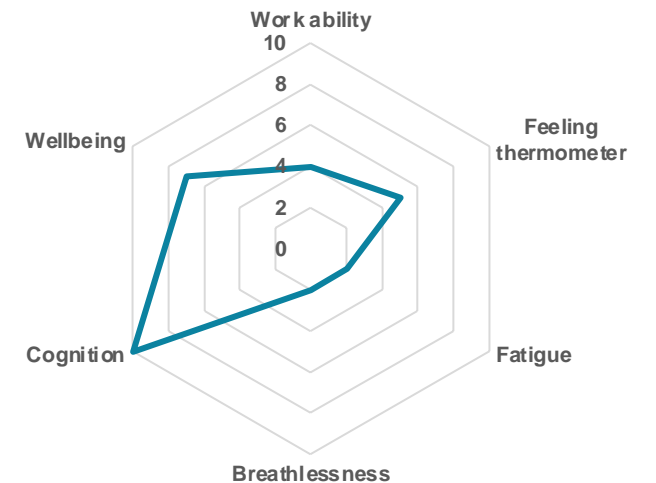
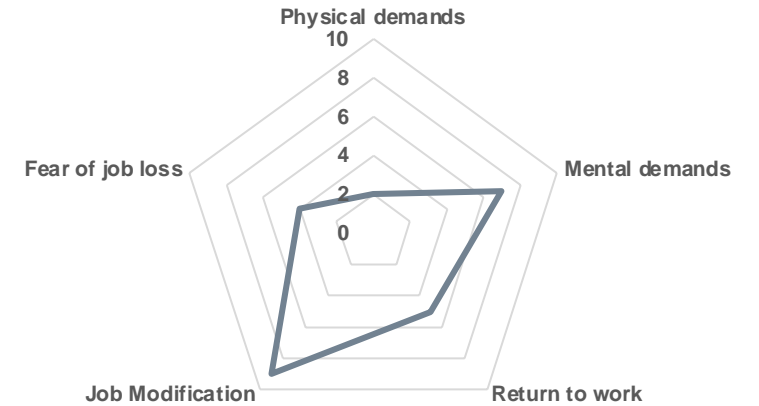
## Screening tool: scores

- Electronic for ease of use & display of scores
- Scores + interpretation displayed for each

Example of general occupational & health scores

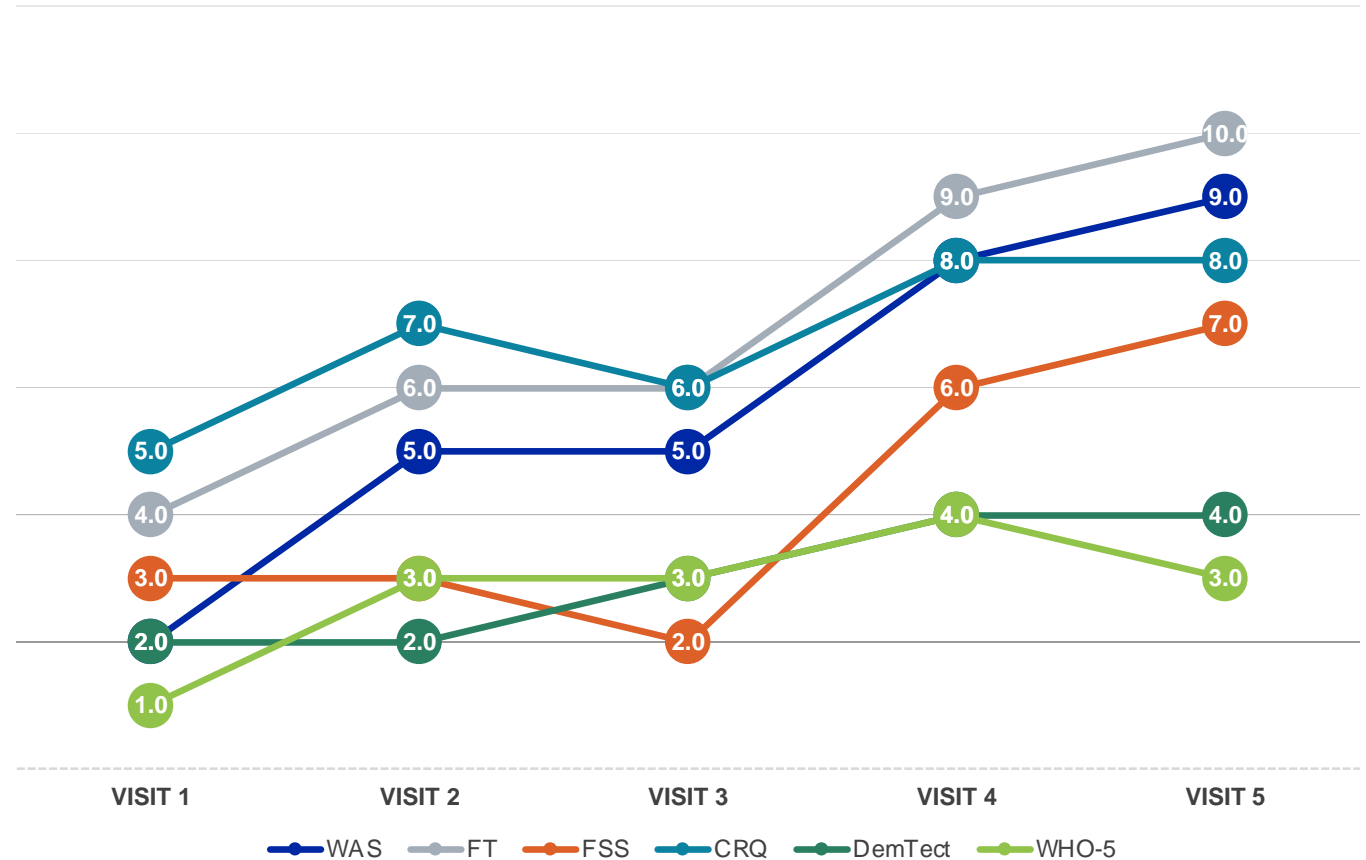


## Separate Occupational & health status

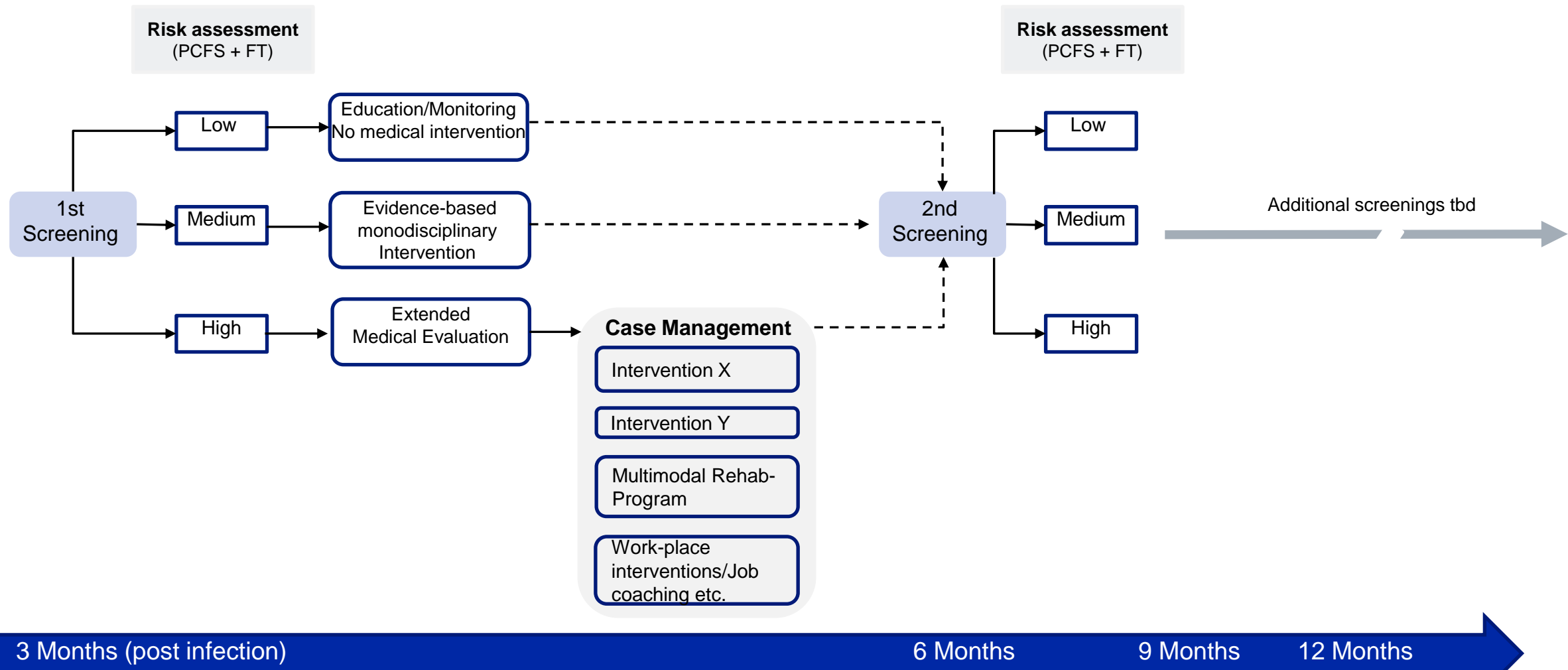


## Screening tool: longitudinal example

- Provide visualization of the change in health over time to patients, HCPs and others



# Managed care model (example)





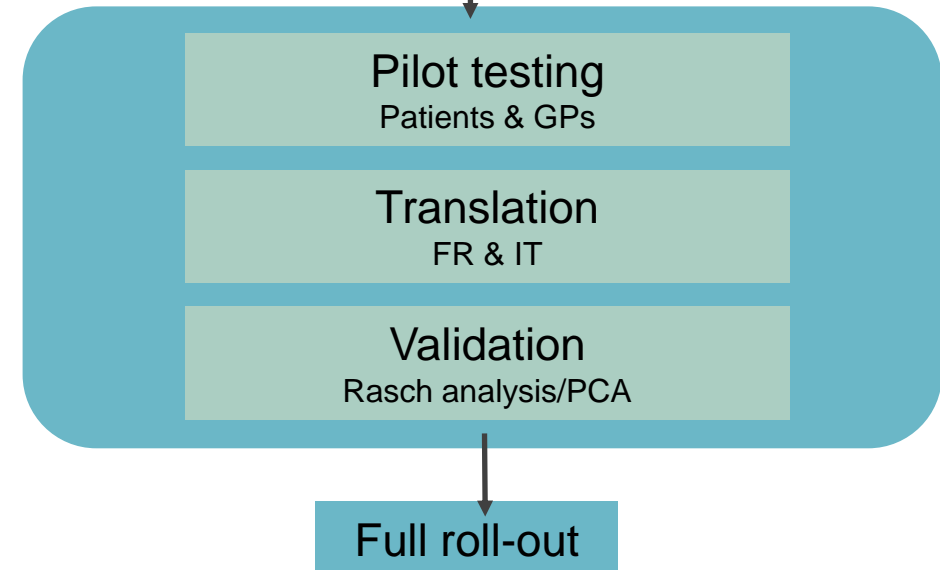
## Next steps

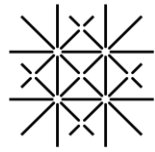
- Consultation with stakeholders
- Development of a remuneration & implementation plan
- Building a web-based version and an electronic database
- Implementation across Switzerland

### Development

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2. Identified available instruments through literature review
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### Evaluation





## Acknowledgments

- All persons who were consulted for feedback during the development of the screening tool EPOCA