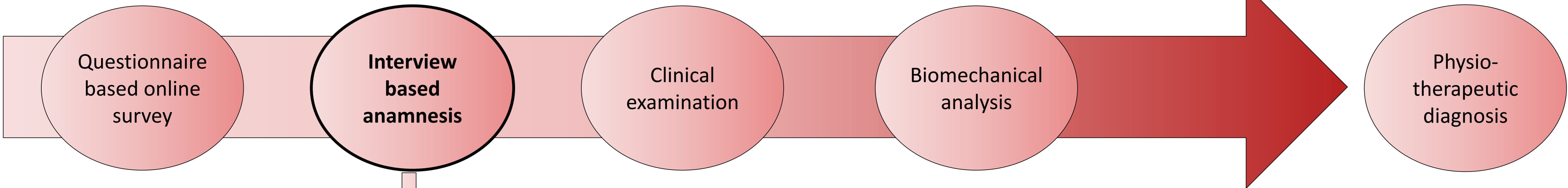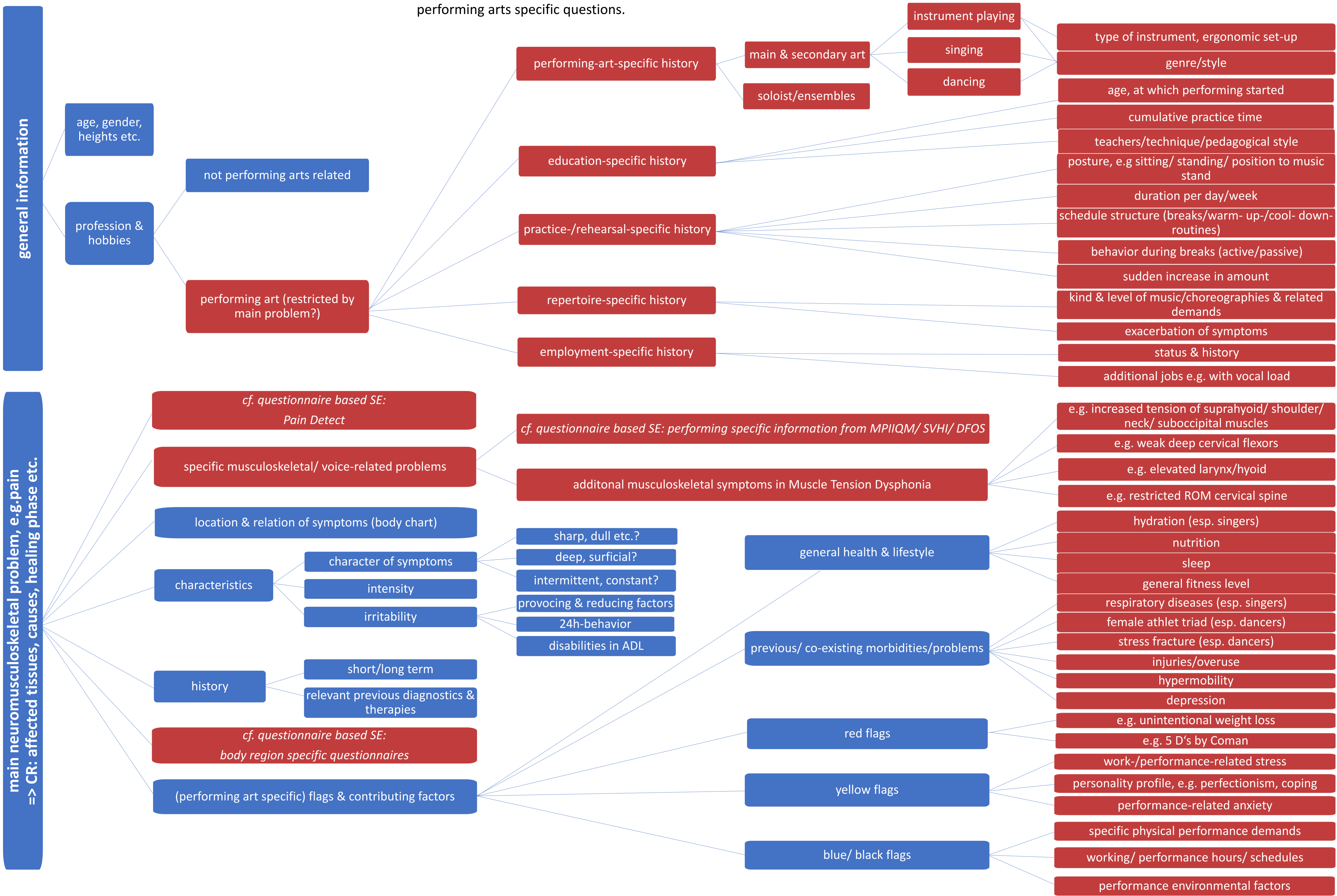# Standardized subjective examination protocol to evaluate performing artists' musculoskeletal health status - part 2: interview based anamnesis

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Introduction This anamnesis structure is part of an examination protocol to evaluate performing artists' musculoskeletal health status. It is intended to standardize the physical therapeutic subjective examination (SE) in performing artists and to support the clinical reasoning process (CR) and the hypothesis forming for further clinical examination and biomechanical analysis.

Questionnaire based online survey → **Interview based anamnesis** → Clinical examination → Biomechanical analysis → Physio-therapeutic diagnosis

Methods Based on a literature review and the expertise of the research group a common physiotherapeutic anamnesis, which addresses the relevant questions for musculoskeletal problems, was supplemented by performing arts specific questions.

general information

- age, gender, heights etc.
- profession & hobbies
  - not performing arts related
  - performing art (restricted by main problem?)
    - performing-art-specific history
      - main & secondary art
        - instrument playing
        - singing
        - dancing
      - soloist/ensembles
    - education-specific history
    - practice-/rehearsal-specific history
    - repertoire-specific history
    - employment-specific history

Related detail items:
- type of instrument, ergonomic set-up
- genre/style
- age, at which performing started
- cumulative practice time
- teachers/technique/pedagogical style
- posture, e.g sitting/ standing/ position to music stand
- duration per day/week
- schedule structure (breaks/warm- up-/cool- down- routines)
- behavior during breaks (active/passive)
- sudden increase in amount
- kind & level of music/choreographies & related demands
- exacerbation of symptoms
- status & history
- additional jobs e.g. with vocal load

main neuromusculoskeletal problem, e.g.pain
=> CR: affected tissues, causes, healing phase etc.

- *cf. questionnaire based SE: Pain Detect*
- specific musculoskeletal/ voice-related problems
  - *cf. questionnaire based SE: performing specific information from MPIIQM/ SVHI/ DFOS*
  - additonal musculoskeletal symptoms in Muscle Tension Dysphonia
    - e.g. increased tension of suprahyoid/ shoulder/ neck/ suboccipital muscles
    - e.g. weak deep cervical flexors
    - e.g. elevated larynx/hyoid
    - e.g. restricted ROM cervical spine
- location & relation of symptoms (body chart)
- characteristics
  - character of symptoms
    - sharp, dull etc.?
    - deep, surficial?
    - intermittent, constant?
  - intensity
  - irritability
    - provocing & reducing factors
    - 24h-behavior
    - disabilities in ADL
- history
  - short/long term
  - relevant previous diagnostics & therapies
- *cf. questionnaire based SE: body region specific questionnaires*
- (performing art specific) flags & contributing factors
  - general health & lifestyle
    - hydration (esp. singers)
    - nutrition
    - sleep
    - general fitness level
    - respiratory diseases (esp. singers)
    - female athlet triad (esp. dancers)
    - stress fracture (esp. dancers)
  - previous/ co-existing morbidities/problems
    - injuries/overuse
    - hypermobility
    - depression
  - red flags
    - e.g. unintentional weight loss
    - e.g. 5 D's by Coman
  - yellow flags
    - work-/performance-related stress
    - personality profile, e.g. perfectionism, coping
    - performance-related anxiety
  - blue/ black flags
    - specific physical performance demands
    - working/ performance hours/ schedules
    - performance environmental factors

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Benefits

- Standardized anamnesis taking
- Individual transfer to the relevant questions
- Combining the results with those from the questionnaire-based subjective examination via a self-developed clinical dashboard
- Graphical provision of results

Conclusion

A pretest of this standardized anamnesis protocol is ongoing in a special physiotherapy clinic for performing artists since spring 2022. In an iterative approach, the protocol will be continuously improved based on patient feedback and clinical considerations.

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RefLabPerform – Reference laboratory for the evaluation of neuromusculoskeletal disorders in performing artists

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