

**Personalised Care of Patients with Heart Failure  
– International Survey on Healthcare Professionals’ Educational Needs**

**Information on the respondent**

- Age range [25–34 / 35–44 / 45–54 / 55–64 / 65–74 / ≥75 years]
- Birth sex [female / male / I prefer not to answer]
- Country
- I am a...
  - Physician
  - Nurse
- If you are a physician, please indicate your primary specialty:
  - Cardiology
  - Internal medicine
  - Other; please specify: \_\_\_\_\_
- Main practice setting (level of care):
  - Primary care
  - Secondary care
  - Tertiary care
  - Super specialist center\*
- Main practice setting (type of institution):
  - Public hospital (teaching)
  - Public hospital (non-teaching)
  - Public outpatient clinic
  - Private hospital
  - Private outpatient practice
  - Other; please specify: \_\_\_\_\_
- Stage in cardiology education or professional career
  - Cardiologist in training
  - Certified cardiologist with ≤5 years of practice
  - Certified cardiologist with >5 years of practice
- Proportion of working time spent in clinical practice [0–20%, >20–40%, >40–60%, >60–80%, >80–100%]
- Proportion of clinical practice time dedicated to heart failure [0–20%, >20–40%, >40–60%, >60–80%, >80–100%]
- Number of personal heart failure consultations per week
  - In the ambulatory setting: \_\_\_\_\_
  - In the hospital setting: \_\_\_\_\_

\*Center performing heart transplants and left ventricular assist device implantations

## Survey questions

**Question 1.** How would you rate the importance of the following objectives in the management of patients with heart failure?

[Please allocate a total of 100 points across the proposed answers]

- Prolong life
- Reduce the number of hospitalizations
- Alleviate heart failure symptoms
- Improve functional capacity
- Improve quality of life
- Reduce dependence on others

**Question 2.** Do you discuss treatment goals with your patients with heart failure?

[Please select one answer]

- Never
- Rarely
- Occasionally
- Frequently
- Always

**Question 3.** Regarding the management of patients with heart failure, what are the strongest influences on your clinical practice?

[Please allocate a total of 100 points across proposed answers]

- Guidelines and position papers
- Hospital protocols
- Quality performance measures / quality improvement programs
- Clinical trial reports
- Real-world evidence (reports from observational studies and registries)
- International and national congresses
- Online educational initiatives (e.g., webinars)
- Guidance from mentors or respected colleagues
- Discussions with patients and their relatives

**Question 4.** Which guidelines do you most frequently refer to regarding the management of patients with heart failure?

[Please allocate a total of 100 points across proposed answers]

- ESC guidelines
- US (ACC/AHA/HFSA) guidelines
- Asia Pacific society guidelines
- Australian guidelines
- Canadian guidelines
- Local national guidelines

**Question 5.** In a patient diagnosed with heart failure, if you cannot achieve both objectives, do you give priority to initiating all guideline-recommended medications or to achieving target doses for some?

[Please select one answer]

- My priority is to initiate all guideline-mandated medications
- My priority is to achieve target doses for some guideline-mandated medications

**Question 6.** In what approximate percentage of your patients diagnosed with heart failure do you follow the conventional sequencing of drug treatment (as opposed to a more personalized approach)?

[Please select one answer]

- 0–20%
- >20–40%
- >40–60%
- >60–80%
- >80–100%

**Question 7.** In what approximate percentage of your patients diagnosed with heart failure do you have to react to treatment-induced side effects?

[Please select one answer]

- 0–20%
- >20–40%
- >40–60%
- >60–80%
- >80–100%

**Question 8.** In your clinical practice, what is the relative importance of the following factors as barriers to the provision of guideline-recommended pharmacological therapy in patients with heart failure?

[Please rank the top 5 barriers from 1 to 5]

- Treatment side effects / intolerance
- Complex treatment regimen requiring administration of numerous drugs
- Cost/reimbursement issues
- Older age
- Frailty
- Low blood pressure
- Low heart rate
- Low eGFR
- Hyperkalemia
- Social isolation
- Depressive symptoms
- Cognitive impairment

**Question 9.** If you had the opportunity to improve the quality of your service for patients with heart failure, what would you do or recommend doing?

[On a scale of 1 to 10 please rate how much you would improve/intensify]

- Increase patient follow-up frequency
- Improve coordination with primary care physicians
- Set up a multidisciplinary heart failure team
- Develop remote consultations and telemonitoring
- Assign a disease management coordinator to each patient
- Establish patient support groups
- Develop educational programs for patients and their caregivers

**Question 10.** Which of the following comorbidities most frequently cause you difficulty in managing your patients with heart failure?

[Please rank the top 5 comorbidities from 1 to 5]

- Coronary artery disease and angina
- Arterial hypertension
- Atrial fibrillation
- Ventricular arrhythmias
- Dyslipidemia
- Mitral regurgitation
- Aortic stenosis
- Tricuspid regurgitation
- Chronic obstructive pulmonary disease
- Diabetes
- Chronic kidney disease
- Hyperkalemia
- Iron deficiency
- Thyroid disorders
- Sleep disordered breathing
- Cognitive disorders
- Depression
- Frailty
- Cachexia

**Question 11.** If additional resources were allocated to disease management and patient involvement, which of the following would you recommend improving or intensifying for your patients with heart failure?

[Please allocate a total of 100 points across proposed answers]

- Provide general information about heart failure (classification, signs, and symptoms)
- Provide general information on diagnostic tests/tools, their rationale and interpretation
- Provide general information about the management of heart failure (drugs and devices)
- Explain test results, treatment decisions and reasons for treatment changes
- Give advice about diet and lifestyle
- Give advice on tools enhancing medication adherence
- Involve patients in sharing decision making regarding treatment decisions
- Recommend joining a group of patients with heart failure
- Assign a heart failure nurse who will help guide patients
- Involve the patient's caregivers and/or family members in the communication

**Question 12.** Please rate the usefulness of the following tools in your daily clinical practice

[Rate each answer on a scale: Very useful > Useful > Moderately useful > Neutral > Moderately not useful > Not useful > Not useful at all]

- Updates and reminders on current clinical practice guidelines
- User-friendly summaries of current clinical practice guidelines, including checklists
- Updates on clinical trial results and their clinical implications
- Practical guidance/checklist on personalized treatment initiation sequencing and dose titration
- Practical guidance/checklist on the management of common comorbidities
- Practical guidance/checklist for remote consultations
- Patient information tools and resources