**Supplemental file 1: Informed consent participating physicians**

**Title of the study: Optimizing standards of care for heart failure patients in general practice**

Research organisation: Departement of Public health and primary care, KUL

Medical ethics committee: UZ Leuven

Local investigators: Dr. Smeets Miek

[Miek.smeets@kuleuven.be](mailto:Miek.smeets@kuleuven.be)

0495/731986

**I Information vital to your decision to take part**

Before you agree to take part in this study, we invite you to take note of its implications in terms of organisation, possible risks and benefits, to allow you to make a decision with full awareness of the implications. This is known as giving “informed consent”.

Please read these few pages of information carefully and ask any questions you want to the investigator (Dr. Smeets Miek).

There are 3 parts to this document: the information essential to your decision, your written consent and supplementary information (appendices) detailing certain aspects of the basic information.

**If you take part in this clinical study, you should be aware that:**

* This clinical study is being conducted after having been reviewed by the medical ethical committee of UZ Leuven.
* Your participation is voluntary and must remain free from any coercion. It requires the signature of a document expressing your consent. Even after having signed this document, you can stop taking part by informing the investigator. Your decision not to take part or to stop taking part in the study will have no impact on the quality of your care or on your relationship with the investigator.
* The data collected on this occasion are confidential and your anonymity is guaranteed during publication of the results.
* Insurance has been taken out in case any of your patients should suffer any damage in connection with your participation in this clinical study.
* If you want additional information, you may contact Dr. Smeets Miek

**Objectives and description of the study protocol**

This study aims at evaluating the feasibility of a multifaceted intervention for heart failure patients in general practice. The multifaceted intervention consists of an extended audit in the GPs’ electronic health record (EHR), a NT-proBNP point-of-care (POC) test and support by a specialized heart failure nurse in your practice.

Before the study start, all patients with a registered heart failure diagnosis will be identified in your EHR. Additionally, the search will be extended to non-registered, possible heart failure patients. As a GP, you will be presented a list of these identified patients and you will be asked to appoint your heart failure patients. All patients identified as heart failure patients will be part of our study population. Quality indicators will be recorded from their EHR. Each practice will receive a feedback report about their current quality of care in heart failure. Targets will be set in each practice based on this report. You will be educated in the use of the NT-proBNP POC test. NT-proBNP can be used in the diagnosis of heart failure. Low NT-proBNP has a high exclusionary value for heart failure. Patients with elevated NT-proBNP should be referred for further evaluation. Additionally, support by the heart failure nurse can be asked on your own discretion. At the study end (after 6 months) a new audit will identify all patients with a registered diagnosis of heart failure in your EHR and quality indicators will be collected again. You will receive a new feedback report on your quality of care after 6 months.

**Course of the study**

If you agree to take part in the study and meet all the conditions required to be enrolled in the study, the following data will be collected:

Demographic variables:

* Age, sex, mother tongue and years of experience in general practice

Patient data:

1. Data about heart failure patients:

* Age, sex, years since diagnosis
* Cardiovascular and non-cardiovascular comorbidities
* Prescriptions, investigations, follow-up

1. Hospitalisations and mortality at practice level (patients ≥40y)

Your patients will be invited on a routine consultation with the heart failure nurse before the study start. At this occasion the study course and objectives will be explained and informed consent will be asked. Additionally, the heart failure nurse will fill in a quality of life questionnaire with the patient and grip strength will be measured. This will take approximately 10 minutes. After the study, patients will be asked to fill in the quality of life questionnaire again. Patients will receive an informational booklet about heart failure.

When you want to perform one of the study interventions (NT-proBNP POC test/support by the heart failure nurse) you have to make sure informed consent is given by the patient. After each study intervention you will be asked to fill in a registration form.

**Risk and benefits**

The main benefit of this study is our aim to optimize the care for your patients with heart failure. The study interventions accord with good clinical practice. Your participation does not contain any risks, not for you, nor for your patients. There is no remuneration for participation.

**Withdrawal from the study**

Your participation is voluntary and you are entitled to withdraw from the study for any reason, without having to justify your decision.

If you withdraw your consent to take part in the study, to guarantee the validity of the research, the data encoded up to the point at which you withdraw will be retained. No new data may be sent to the sponsor.

**If you take part in this clinical study, we ask you:**

* To cooperate fully in the smooth running of this study.

**Contact**

* If you need further information, but also if you have problems or concerns, you can contact the investigator (Smeets Miek) on the following telephone number 0495/731986.
* If you have any questions relating to your rights as a participant in a clinical study, you can contact the patient rights ombudsman of UZ Leuven, Gasthuisberg, between 8h30 and 16h30 on this telephone number: 016/344818. If necessary, he/she can put you in contact with the ethics committee.

Study title: Optimizing standards of care for heart failure patients in general practice

# II Informed consent

**Participant**

I declare that I have been informed of the nature of the study, its purpose, its duration, any risks and benefits and what is expected of me. I have taken note of the information document and the appendices to this document.

I have had sufficient time to think about it and discuss it with a person of my choice.

I have had the opportunity to ask any questions that came to mind and have obtained a satisfactory response to my questions.

I understand that my participation in this study is voluntary and that I am free to end my participation in this study without this affecting my relationship with the therapeutic team in charge of my health.

I understand that data about my patients will be collected throughout my participation in this study and that the investigator and the sponsor of the study will guarantee the confidentiality of these data.

I agree to my personal data and the data of my patients being processed as described in the section dealing with confidentiality guarantees (part III). I also consent to these data being transferred to and processed in countries other than Belgium.

I agree/do not agree (delete as appropriate) to the study data collected for the purposes of this study being processed at a later date provided this processing is limited to the context of the present study for a better understanding of the disease and its treatment.

I have received a copy of the information to the participant and the informed consent form.

Surname, first name, date and signature of the volunteer.

**Investigator**

I, the undersigned, Smeets Miek, investigator, confirm that I have verbally provided the necessary information about the study and have given the participant a copy of the information document.

I confirm that no pressure was applied to persuade the patient to agree to take part in the study and that I am willing to answer any additional questions if required.

I confirm that I operate in accordance with the ethical principles set out in the latest version of the “Helsinki Declaration”, the “Good Clinical Practices” and the Belgian Law of 7 May 2004 related to experiments on humans.

Surname, first name, date and signature of the investigator

Study title: Optimizing standards of care for heart failure patients in general practice

**III Supplementary information**

**1. Supplementary information on the protection and the rights of the participant in a clinical study**

### *Ethics Committee*

This study has been reviewed by an independent Ethics Committee, namely the Ethics Committee of UZ Leuven which has issued a favourable opinion. It is the task of the Ethics Committees to protect people who take part in a clinical trial. They make sure that your rights as a patient and as a participant in a clinical study are respected, that based on current knowledge, the balance between risks and benefits remains favourable to the participants, that the study is scientifically relevant and ethical.  
You should not under any circumstances take the favourable opinion of the Ethics Committee as an incentive to take part in this study.

### *Voluntary participation*

Before signing, do not hesitate to ask any questions you feel are appropriate. Take the time to discuss matters with a trusted person if you so wish.

Your participation in the study is voluntary and must remain free of any coercion: this means that you have the right not to take part in the study or to withdraw without giving a reason, even if you previously agreed to take part. Your decision will not affect your relationship with the investigator or the quality of your future therapeutic care.

However, it is advisable for your safety to inform the investigator if you have decided to stop taking part in the study.

If you agree to take part, you will sign the informed consent form. The investigator will also sign this form to confirm that he/she has provided you with the necessary information about the study. You will receive a copy of the form.

### *Costs associated with your participation*

There will be no remuneration for your participation in this study. Neither are additional costs involved.

### *Guarantee of confidentiality*

Your participation in the study means that you agree to the investigator collecting data about you and your patients and to the study sponsor using these data for research purposes and in connection with scientific and medical publications.

You are entitled to ask the investigator what data are being collected about you and what is their use in connection with the study. You have the right to inspect these data and correct them if they are incorrect.

The investigator has a duty of confidentiality vis-à-vis the data collected.

This means that she undertakes not only never to reveal your name or the name of your patients in the context of a publication or conference but also that she will encode (your identity will be replaced by an ID code in the study) your data before sending them to the manager of the database of collected data (Departement of Public health and Primary care, KULeuven).

The investigator and her team will therefore be the only ones to be able to establish a link between the data transmitted throughout the study and the medical records of your patients.

To verify the quality of the study, it is possible that your medical records will be examined by persons subject to professional secrecy and designated by the ethics committee, the sponsor of the study or an independent audit body. In any event, this examination of your medical records may only take place under the responsibility of the investigator and under the supervision of one of the collaborators designated by her.

The (encoded) study data will be able to be sent to Belgian or other regulatory authorities, to the relevant ethics committees, to other doctors and/or to organisations working in collaboration with the sponsor.

Your consent to take part in this study therefore also implies your consent to the use of your encoded medical data for the purposes described in this information form and to their transmission to the aforementioned people and authorities.

The sponsor undertakes only to use the data collected within the context of the study in which you are taking part.

If you withdraw your consent to take part in the study, to guarantee the validity of the research, the data encoded up to the point at which you withdraw will be retained. No new data may be sent to the sponsor.

### *Insurance*

Any participation in a clinical study involves a risk, however small it is. According to the Belgian law of 7th of may 2004, even if there is no fault, the sponsor accepts responsibility for damage caused to the participant (or in the event of death, his/her dependants) and directly or indirectly linked to his/her participation in the study. The sponsor has taken out insurance for this responsibility.

**Supplemental file 2.1: Informed consent mentally competent patients with heart failure**

**Title of the study: Optimizing standards of care for heart failure patients in general practice**

Research organisation: Departement of Public health and primary care, KUL

Medical ethics committee: UZ Leuven

Local investigators: Dr. Smeets Miek

[Miek.smeets@kuleuven.be](mailto:Miek.smeets@kuleuven.be)

0495/731986

**I Information vital to your decision to take part**

Before you agree to take part in this study, we invite you to take note of its implications in terms of organisation, possible risks and benefits, to allow you to make a decision with full awareness of the implications. This is known as giving “informed consent”.

Please read these few pages of information carefully and ask any questions you want to the investigator (Dr. Smeets Miek).

There are 3 parts to this document: the information essential to your decision, your written consent and supplementary information (appendices) detailing certain aspects of the basic information.

**If you take part in this clinical study, you should be aware that:**

* This clinical study is being conducted after having been reviewed by the medical ethical committee of UZ Leuven.
* Your participation is voluntary and must remain free from any coercion. It requires the signature of a document expressing your consent. Even after having signed this document, you can stop taking part by informing the investigator. Your decision not to take part or to stop taking part in the study will have no impact on the quality of your care or on your relationship with the investigator.
* The data collected on this occasion are confidential and your anonymity is guaranteed during publication of the results.
* Insurance has been taken out in case any of your patients should suffer any damage in connection with your participation in this clinical study.
* If you want additional information, you may contact Dr. Smeets Miek

**Objectives and description of the study protocol**

Your general practice is taking part at this study to improve the care for patients with heart failure. This study involves education about your condition. Additionally, your GP will get advice from a specialized heart failure nurse. He/she can be asked by your GP for assistance in informing you about your condition, revising your medical treatment or to enhance closer follow-up after hospitalization. Your GP remains responsible for your treatment. The heart failure nurse only gives advice. The support by the heart failure nurse involves no costs, not for you, nor for your practice. The study will run for 6 months. Furthermore, your general practice will receive a device to measure a marker of heart failure in your blood (NT-proBNP). This can help your GP in the diagnosis of heart failure or to get a better idea of the severity of your condition. This marker can be measured by a regular venous blood take. The result will be known after 12 minutes. This test is also free for you and your practice.

**Course of the study**

If you agree to take part in the study and meet all the conditions required to be enrolled in the study, the following data will be collected from your electronic health record (EHR) (before study start and after 6 months):

* Age, sex
* Comorbidities
* Hospitalisations or mortality
* Prescriptions, investigations and follow-up

Additionally, the heart failure nurse will fill in a quality of life questionnaire with you during a routine consultation and will measure your grip strength. This will take approximately 10 minutes. After 6 months, you will be asked to fill in this questionnaire again.

Your GP will be asked to fill in a registration form after a referral to the heart failure nurse or NT-proBNP measurement.

**Risk and benefits**

The main benefit of this study is our aim to optimize the care for your patients with heart failure. The study interventions accord with good clinical practice. Your participation does not contain any risks. There is no remuneration for participation.

**Withdrawal from the study**

Your participation is voluntary and you are entitled to withdraw from the study for any reason, without having to justify your decision.

If you withdraw your consent to take part in the study, to guarantee the validity of the research, the data encoded up to the point at which you withdraw will be retained. No new data may be sent to the sponsor.

**If you take part in this clinical study, we ask you:**

* To cooperate fully in the smooth running of this study.
* Not to conceal any information relating to your state of health, the medication you are taking or the symptoms you are experiencing.

**Contact**

* If you need further information, but also if you have problems or concerns, you can contact the investigator (Smeets Miek) on the following telephone number 0495/731986.
* If you have any questions relating to your rights as a participant in a clinical study, you can contact the patient rights ombudsman of UZ Leuven, Gasthuisberg, between 8h30 and 16h30 on this telephone number: 016/344818. If necessary, he/she can put you in contact with the ethics committee.

Study title: Optimizing standards of care for heart failure patients in general practice

# II Informed consent

**Participant**

I declare that I have been informed of the nature of the study, its purpose, its duration, any risks and benefits and what is expected of me. I have taken note of the information document and the appendices to this document.

I have had sufficient time to think about it and discuss it with a person of my choice.

I have had the opportunity to ask any questions that came to mind and have obtained a satisfactory response to my questions.

I understand that my participation in this study is voluntary and that I am free to end my participation in this study without this affecting my relationship with the therapeutic team in charge of my health.

I understand that data about me will be collected throughout my participation in this study and that the investigator and the sponsor of the study will guarantee the confidentiality of these data.

I agree to my personal data being processed as described in the section dealing with confidentiality guarantees (part III). I also consent to these data being transferred to and processed in countries other than Belgium.

I agree/do not agree (delete as appropriate) to the study data collected for the purposes of this study being processed at a later date provided this processing is limited to the context of the present study for a better understanding of the disease and its treatment.

I have received a copy of the information to the participant and the informed consent form.

Surname, first name, date and signature of the volunteer.

**Nurse Investigator**

I, the undersigned, nurse investigator, confirm that I have verbally provided the necessary information about the study and have given the participant a copy of the information document.

I confirm that no pressure was applied to persuade the patient to agree to take part in the study and that I am willing to answer any additional questions if required.

I confirm that I operate in accordance with the ethical principles set out in the latest version of the “Helsinki Declaration”, the “Good Clinical Practices” and the Belgian Law of 7 May 2004 related to experiments on humans.

Surname, first name, date and signature of the nurse investigator

Study title: Optimizing standards of care for heart failure patients in general practice

**III Supplementary information**

**1. Supplementary information on the protection and the rights of the participant in a clinical study**

### *Ethics Committee*

This study has been reviewed by an independent Ethics Committee, namely the Ethics Committee of UZ Leuven which has issued a favourable opinion. It is the task of the Ethics Committees to protect people who take part in a clinical trial. They make sure that your rights as a patient and as a participant in a clinical study are respected, that based on current knowledge, the balance between risks and benefits remains favourable to the participants, that the study is scientifically relevant and ethical.  
You should not under any circumstances take the favourable opinion of the Ethics Committee as an incentive to take part in this study.

### *Voluntary participation*

Before signing, do not hesitate to ask any questions you feel are appropriate. Take the time to discuss matters with a trusted person if you so wish.

Your participation in the study is voluntary and must remain free of any coercion: this means that you have the right not to take part in the study or to withdraw without giving a reason, even if you previously agreed to take part. Your decision will not affect your relationship with the investigator or the quality of your future therapeutic care.

However, it is advisable for your safety to inform the investigator if you have decided to stop taking part in the study.

If you agree to take part, you will sign the informed consent form. The investigator will also sign this form to confirm that he/she has provided you with the necessary information about the study. You will receive a copy of the form.

### *Costs associated with your participation*

There will be no remuneration for your participation in this study. Neither are additional costs involved.

### *Guarantee of confidentiality*

Your participation in the study means that you agree to the investigator collecting data about you and to the study sponsor using these data for research purposes and in connection with scientific and medical publications.

You are entitled to ask the investigator what data are being collected about you and what is their use in connection with the study. You have the right to inspect these data and correct them if they are incorrect.

The investigator has a duty of confidentiality vis-à-vis the data collected.

This means that she undertakes not only never to reveal your name or the name of your patients in the context of a publication or conference but also that she will encode (your identity will be replaced by an ID code in the study) your data before sending them to the manager of the database of collected data (Departement of Public health and Primary care, KULeuven).

The investigator and her team will therefore be the only ones to be able to establish a link between the data transmitted throughout the study and your medical record.

To verify the quality of the study, it is possible that your medical records will be examined by persons subject to professional secrecy and designated by the ethics committee, the sponsor of the study or an independent audit body. In any event, this examination of your medical records may only take place under the responsibility of the investigator and under the supervision of one of the collaborators designated by her.

The (encoded) study data will be able to be sent to Belgian or other regulatory authorities, to the relevant ethics committees, to other doctors and/or to organisations working in collaboration with the sponsor.

Your consent to take part in this study therefore also implies your consent to the use of your encoded medical data for the purposes described in this information form and to their transmission to the aforementioned people and authorities.

The sponsor undertakes only to use the data collected within the context of the study in which you are taking part.

If you withdraw your consent to take part in the study, to guarantee the validity of the research, the data encoded up to the point at which you withdraw will be retained. No new data may be sent to the sponsor.

### *Insurance*

Any participation in a clinical study involves a risk, however small it is. According to the Belgian law of 7th of may 2004, even if there is no fault, the sponsor accepts responsibility for damage caused to the participant (or in the event of death, his/her dependants) and directly or indirectly linked to his/her participation in the study. The sponsor has taken out insurance for this responsibility.

**Supplemental file 2.2: Informed consent mentally incompetent patients with heart failure**

**Title of the study: Optimizing standards of care for heart failure patients in general practice**

Research organisation: Departement of Public health and primary care, KUL

Medical ethics committee: UZ Leuven

Local investigators: Dr. Smeets Miek

[Miek.smeets@kuleuven.be](mailto:Miek.smeets@kuleuven.be)

0495/731986

**For the attention of the patient:** It may be that when you were included in the study, you were incapable to decide for yourself whether or not to take part in this study. It is then customary to use a legal representative, who is asked to make a decision on the person’s participation in the study in the best interests of this person and taking into consideration his/her likely wishes. Your representative agreed to your participation in this study, knowing that once your clinical situation allowed, you would be informed of your participation in a clinical study and from that point would be free to continue with this participation or end it. We are now asking you to confirm whether or not you wish to take part.

**For the attention of the legal representative:** Because of his/her clinical situation, the person you represent is not currently deemed capable of deciding whether or not to participate with full awareness of the implications. You are therefore being invited to decide whether he/she should participate in this clinical study, taking into consideration his/her likely wishes.

In the remainder of this document, the sentences are worded as if we were directly addressing the person you represent.

**I Information vital to your decision to take part**

Before you agree to take part in this study, we invite you to take note of its implications in terms of organisation, possible risks and benefits, to allow you to make a decision with full awareness of the implications. This is known as giving “informed consent”.

Please read these few pages of information carefully and ask any questions you want to the investigator (Dr. Smeets Miek).

There are 3 parts to this document: the information essential to your decision, your written consent and supplementary information (appendices) detailing certain aspects of the basic information.

**If you take part in this clinical study, you should be aware that:**

* This clinical study is being conducted after having been reviewed by the medical ethical committee of UZ Leuven.
* Your participation is voluntary and must remain free from any coercion. It requires the signature of a document expressing your consent. Even after having signed this document, you can stop taking part by informing the investigator. Your decision not to take part or to stop taking part in the study will have no impact on the quality of your care or on your relationship with the investigator.
* The data collected on this occasion are confidential and your anonymity is guaranteed during publication of the results.
* Insurance has been taken out in case any of your patients should suffer any damage in connection with your participation in this clinical study.
* If you want additional information, you may contact Dr. Smeets Miek

**Objectives and description of the study protocol**

Your general practice is taking part at this study to improve the care for patients with heart failure. This study involves education about your condition. Additionally, your GP will get advice from a specialized heart failure nurse. He/she can be asked by your GP for assistance in informing you about your condition, revising your medical treatment or to enhance closer follow-up after hospitalization. Your GP remains responsible for your treatment. The heart failure nurse only gives advice. The support by the heart failure nurse involves no costs, not for you, nor for your practice. The study will run for 6 months. Furthermore, your general practice will receive a device to measure a marker of heart failure in your blood (NT-proBNP). This can help your GP in the diagnosis of heart failure or to get a better idea of the severity of your condition. This marker can be measured by a regular venous blood take. The result will be known after 12 minutes. This test is also free for you and your practice.

**Course of the study**

If you agree to take part in the study and meet all the conditions required to be enrolled in the study, the following data will be collected from your electronic health record (EHR) (before study start and after 6 months):

* Age, sex
* Comorbidities
* Hospitalisations or mortality
* Prescriptions, investigations and follow-up

Additionally, the heart failure nurse will fill in a quality of life questionnaire with you during a routine consultation and will measure your grip strength. This will take approximately 10 minutes. After 6 months, you will be asked to fill in this questionnaire again.

Your GP will be asked to fill in a registration form after a referral to the heart failure nurse or NT-proBNP measurement.

**Risk and benefits**

The main benefit of this study is our aim to optimize the care for your patients with heart failure. The study interventions accord with good clinical practice. Your participation does not contain any risks. There is no remuneration for participation.

**Withdrawal from the study**

Your participation is voluntary and you are entitled to withdraw from the study for any reason, without having to justify your decision.

If you withdraw your consent to take part in the study, to guarantee the validity of the research, the data encoded up to the point at which you withdraw will be retained. No new data may be sent to the sponsor.

**If you take part in this clinical study, we ask you:**

* To cooperate fully in the smooth running of this study.
* Not to conceal any information relating to your state of health, the medication you are taking or the symptoms you are experiencing.

**Contact**

* If you need further information, but also if you have problems or concerns, you can contact the investigator (Smeets Miek) on the following telephone number 0495/731986.
* If you have any questions relating to your rights as a participant in a clinical study, you can contact the patient rights ombudsman of UZ Leuven, Gasthuisberg, between 8h30 and 16h30 on this telephone number: 016/344818. If necessary, he/she can put you in contact with the ethics committee.

Study title: Optimizing standards of care for heart failure patients in general practice

# II Informed consent

**Participant**

I declare that I have been informed of the nature of the study, its purpose, its duration, any risks and benefits and what is expected of me. I have taken note of the information document and the appendices to this document.

I have had sufficient time to think about it and discuss it with a person of my choice.

I have had the opportunity to ask any questions that came to mind and have obtained a satisfactory response to my questions.

I understand that my participation in this study is voluntary and that I am free to end my participation in this study without this affecting my relationship with the therapeutic team in charge of my health.

I understand that data about me will be collected throughout my participation in this study and that the investigator and the sponsor of the study will guarantee the confidentiality of these data.

I agree to my personal data being processed as described in the section dealing with confidentiality guarantees (part III). I also consent to these data being transferred to and processed in countries other than Belgium.

I agree/do not agree (delete as appropriate) to the study data collected for the purposes of this study being processed at a later date provided this processing is limited to the context of the present study for a better understanding of the disease and its treatment.

I have received a copy of the information to the participant and the informed consent form.

Surname, first name, date and signature of the volunteer.

**Nurse Investigator**

I, the undersigned, nurse investigator, confirm that I have verbally provided the necessary information about the study and have given the participant a copy of the information document.

I confirm that no pressure was applied to persuade the patient to agree to take part in the study and that I am willing to answer any additional questions if required.

I confirm that I operate in accordance with the ethical principles set out in the latest version of the “Helsinki Declaration”, the “Good Clinical Practices” and the Belgian Law of 7 May 2004 related to experiments on humans.

Surname, first name, date and signature of the nurse investigator

Study title: Optimizing standards of care for heart failure patients in general practice

**III Supplementary information**

**1. Supplementary information on the protection and the rights of the participant in a clinical study**

### *Ethics Committee*

This study has been reviewed by an independent Ethics Committee, namely the Ethics Committee of UZ Leuven which has issued a favourable opinion. It is the task of the Ethics Committees to protect people who take part in a clinical trial. They make sure that your rights as a patient and as a participant in a clinical study are respected, that based on current knowledge, the balance between risks and benefits remains favourable to the participants, that the study is scientifically relevant and ethical.  
You should not under any circumstances take the favourable opinion of the Ethics Committee as an incentive to take part in this study.

### *Voluntary participation*

Before signing, do not hesitate to ask any questions you feel are appropriate. Take the time to discuss matters with a trusted person if you so wish.

Your participation in the study is voluntary and must remain free of any coercion: this means that you have the right not to take part in the study or to withdraw without giving a reason, even if you previously agreed to take part. Your decision will not affect your relationship with the investigator or the quality of your future therapeutic care.

However, it is advisable for your safety to inform the investigator if you have decided to stop taking part in the study.

If you agree to take part, you will sign the informed consent form. The investigator will also sign this form to confirm that he/she has provided you with the necessary information about the study. You will receive a copy of the form.

### *Costs associated with your participation*

There will be no remuneration for your participation in this study. Neither are additional costs involved.

### *Guarantee of confidentiality*

Your participation in the study means that you agree to the investigator collecting data about you and to the study sponsor using these data for research purposes and in connection with scientific and medical publications.

You are entitled to ask the investigator what data are being collected about you and what is their use in connection with the study. You have the right to inspect these data and correct them if they are incorrect.

The investigator has a duty of confidentiality vis-à-vis the data collected.

This means that she undertakes not only never to reveal your name or the name of your patients in the context of a publication or conference but also that she will encode (your identity will be replaced by an ID code in the study) your data before sending them to the manager of the database of collected data (Departement of Public health and Primary care, KULeuven).

The investigator and her team will therefore be the only ones to be able to establish a link between the data transmitted throughout the study and your medical record.

To verify the quality of the study, it is possible that your medical records will be examined by persons subject to professional secrecy and designated by the ethics committee, the sponsor of the study or an independent audit body. In any event, this examination of your medical records may only take place under the responsibility of the investigator and under the supervision of one of the collaborators designated by her.

The (encoded) study data will be able to be sent to Belgian or other regulatory authorities, to the relevant ethics committees, to other doctors and/or to organisations working in collaboration with the sponsor.

Your consent to take part in this study therefore also implies your consent to the use of your encoded medical data for the purposes described in this information form and to their transmission to the aforementioned people and authorities.

The sponsor undertakes only to use the data collected within the context of the study in which you are taking part.

If you withdraw your consent to take part in the study, to guarantee the validity of the research, the data encoded up to the point at which you withdraw will be retained. No new data may be sent to the sponsor.

### *Insurance*

Any participation in a clinical study involves a risk, however small it is. According to the Belgian law of 7th of may 2004, even if there is no fault, the sponsor accepts responsibility for damage caused to the participant (or in the event of death, his/her dependants) and directly or indirectly linked to his/her participation in the study. The sponsor has taken out insurance for this responsibility.

**Supplemental file 3: Informed consent NT-proBNP POC test**

**Title of the study: Optimizing standards of care for heart failure patients in general practice**

Research organisation: Departement of Public health and primary care, KUL

Medical ethics committee: UZ Leuven

Local investigators: Dr. Smeets Miek

[Miek.smeets@kuleuven.be](mailto:Miek.smeets@kuleuven.be)

0495/731986

**I Information vital to your decision to take part**

Before you agree to take part in this study, we invite you to take note of its implications in terms of organisation, possible risks and benefits, to allow you to make a decision with full awareness of the implications. This is known as giving “informed consent”.

Please read these few pages of information carefully and ask any questions you want to the investigator (Dr. Smeets Miek).

There are 3 parts to this document: the information essential to your decision, your written consent and supplementary information (appendices) detailing certain aspects of the basic information.

**If you take part in this clinical study, you should be aware that:**

* This clinical study is being conducted after having been reviewed by the medical ethical committee of UZ Leuven.
* Your participation is voluntary and must remain free from any coercion. It requires the signature of a document expressing your consent. Even after having signed this document, you can stop taking part by informing the investigator. Your decision not to take part or to stop taking part in the study will have no impact on the quality of your care or on your relationship with the investigator.
* The data collected on this occasion are confidential and your anonymity is guaranteed during publication of the results.
* Insurance has been taken out in case any of your patients should suffer any damage in connection with your participation in this clinical study.
* If you want additional information, you may contact Dr. Smeets Miek

**Objectives and description of the study protocol**

Your general practitioner takes part in a study to optimize care for patients with heart failure. As part of the study, he/she receives a device to measure a marker for heart failure in your blood, NT-proBNP. This marker is currently not reimbursed in Belgium, although it is recommended by guidelines to use it for the diagnosis of heart failure. Heart failure is a difficult diagnosis. Patients present themselves with non-specific symptoms and signs as fatigue, shortness of breath, ankle edema,... A normal test result excludes heart failure. An elevated value does not mean the diagnosis of heart failure can be made but it can be an additional reason to refer to a cardiologist for further investigations. To measure this marker a regular venous blood take is sufficient. The results will be known in 12 minutes. No additional costs are involved, not for your GP, nor for you.

**Course of the study**

Your participation to this study is limited to the NT-proBNP POC test.

If you agree to take part in the study and meet all the conditions required to be enrolled in the study, the following data will be collected:

* Age, sex
* Test results and consequences of the test

This data will be registered by your GP in a study registration form. Your GP will be asked how he/she rated the utility of the test, the result of the test and how this result influenced further practice.

**Risk and benefits**

The NT-proBNP POC test can assist your GP in appointing the correct diagnosis. The study intervention accords with good clinical practice. Your participation does not contain any risks. There is no remuneration for participation.

**Withdrawal from the study**

Your participation is voluntary and you are entitled to withdraw from the study for any reason, without having to justify your decision.

If you withdraw your consent to take part in the study, to guarantee the validity of the research, the data encoded up to the point at which you withdraw will be retained. No new data may be sent to the sponsor.

**If you take part in this clinical study, we ask you:**

* To cooperate fully in the smooth running of this study.
* Not to conceal any information relating to your state of health, the medication you are taking or the symptoms you are experiencing.

**Contact**

* If you need further information, but also if you have problems or concerns, you can contact the investigator (Smeets Miek) on the following telephone number 0495/731986.
* If you have any questions relating to your rights as a participant in a clinical study, you can contact the patient rights ombudsman of UZ Leuven, Gasthuisberg, between 8h30 and 16h30 on this telephone number: 016/344818. If necessary, he/she can put you in contact with the ethics committee.

Study title: Optimizing standards of care for heart failure patients in general practice

# II Informed consent

**Participant**

I declare that I have been informed of the nature of the study, its purpose, its duration, any risks and benefits and what is expected of me. I have taken note of the information document and the appendices to this document.

I have had sufficient time to think about it and discuss it with a person of my choice.

I have had the opportunity to ask any questions that came to mind and have obtained a satisfactory response to my questions.

I understand that my participation in this study is voluntary and that I am free to end my participation in this study without this affecting my relationship with the therapeutic team in charge of my health.

I understand that data about me will be collected throughout my participation in this study and that the investigator and the sponsor of the study will guarantee the confidentiality of these data.

I agree to my personal data being processed as described in the section dealing with confidentiality guarantees (part III). I also consent to these data being transferred to and processed in countries other than Belgium.

I agree/do not agree (delete as appropriate) to the study data collected for the purposes of this study being processed at a later date provided this processing is limited to the context of the present study for a better understanding of the disease and its treatment.

I have received a copy of the information to the participant and the informed consent form.

Surname, first name, date and signature of the volunteer.

**Treating physician**

I, the undersigned, treating physician, confirm that I have verbally provided the necessary information about the study and have given the participant a copy of the information document.

I confirm that no pressure was applied to persuade the patient to agree to take part in the study and that I am willing to answer any additional questions if required.

I confirm that I operate in accordance with the ethical principles set out in the latest version of the “Helsinki Declaration”, the “Good Clinical Practices” and the Belgian Law of 7 May 2004 related to experiments on humans.

Surname, first name, date and signature of the treating physician

Study title: Optimizing standards of care for heart failure patients in general practice

**III Supplementary information**

**1. Supplementary information on the protection and the rights of the participant in a clinical study**

### *Ethics Committee*

This study has been reviewed by an independent Ethics Committee, namely the Ethics Committee of UZ Leuven which has issued a favourable opinion. It is the task of the Ethics Committees to protect people who take part in a clinical trial. They make sure that your rights as a patient and as a participant in a clinical study are respected, that based on current knowledge, the balance between risks and benefits remains favourable to the participants, that the study is scientifically relevant and ethical.  
You should not under any circumstances take the favourable opinion of the Ethics Committee as an incentive to take part in this study.

### *Voluntary participation*

Before signing, do not hesitate to ask any questions you feel are appropriate. Take the time to discuss matters with a trusted person if you so wish.

Your participation in the study is voluntary and must remain free of any coercion: this means that you have the right not to take part in the study or to withdraw without giving a reason, even if you previously agreed to take part. Your decision will not affect your relationship with the investigator or the quality of your future therapeutic care.

However, it is advisable for your safety to inform the investigator if you have decided to stop taking part in the study.

If you agree to take part, you will sign the informed consent form. The investigator will also sign this form to confirm that he/she has provided you with the necessary information about the study. You will receive a copy of the form.

### *Costs associated with your participation*

There will be no remuneration for your participation in this study. Neither are additional costs involved.

### *Guarantee of confidentiality*

Your participation in the study means that you agree to the investigator collecting data about you and to the study sponsor using these data for research purposes and in connection with scientific and medical publications.

You are entitled to ask the investigator what data are being collected about you and what is their use in connection with the study. You have the right to inspect these data and correct them if they are incorrect.

The investigator has a duty of confidentiality vis-à-vis the data collected.

This means that she undertakes not only never to reveal your name or the name of your patients in the context of a publication or conference but also that she will encode (your identity will be replaced by an ID code in the study) your data before sending them to the manager of the database of collected data (Departement of Public health and Primary care, KULeuven).

The investigator and her team will therefore be the only ones to be able to establish a link between the data transmitted throughout the study and your medical record.

To verify the quality of the study, it is possible that your medical records will be examined by persons subject to professional secrecy and designated by the ethics committee, the sponsor of the study or an independent audit body. In any event, this examination of your medical records may only take place under the responsibility of the investigator and under the supervision of one of the collaborators designated by her.

The (encoded) study data will be able to be sent to Belgian or other regulatory authorities, to the relevant ethics committees, to other doctors and/or to organisations working in collaboration with the sponsor.

Your consent to take part in this study therefore also implies your consent to the use of your encoded medical data for the purposes described in this information form and to their transmission to the aforementioned people and authorities.

The sponsor undertakes only to use the data collected within the context of the study in which you are taking part.

If you withdraw your consent to take part in the study, to guarantee the validity of the research, the data encoded up to the point at which you withdraw will be retained. No new data may be sent to the sponsor.

### *Insurance*

Any participation in a clinical study involves a risk, however small it is. According to the Belgian law of 7th of may 2004, even if there is no fault, the sponsor accepts responsibility for damage caused to the participant (or in the event of death, his/her dependants) and directly or indirectly linked to his/her participation in the study. The sponsor has taken out insurance for this responsibility.

**Supplemental file 4: Queries used to search for registered HF patients in the EMHS** (basic audit)

|  |  |
| --- | --- |
| **Registered Heart Failure patients: Used queries** | |
| Heart Failure coded | ICPC-2-code: K77 |
| Heart Failure free text | “hartfalen” OR “corfalen” OR “hartsdecompensatie” OR “hartdecompensatie” OR “cordecompensatie” OR “NYHA” OR “LVfalen” OR “linkerventrikelfalen” OR “LVdysfunctie” OR “linkerventrikeldysfunctie” OR “LVdecompensatie” OR “linkerventrikeldecompensatie” OR “gedaalde EF” OR “gedaalde ejectiefractie” OR “gedaalde LVEF” OR “verminderde EF” OR “verminderde ejectiefractie” OR “verminderde LVEF”  “decompensatie” NOT “psychische decompensatie” |
| ICPC-2, international classification of primary care second edition | |

**Supplemental file 5: Queries used to search for additional patients within the EMHS** (extended audit)

|  |  |  |
| --- | --- | --- |
| Non-registered HF patients: used queries | | |
| HF risk factors | | |
|  | Atrial fibrillation coded | ICPC-2 code K78 |
|  | Atrial fibrillation free text | “voorkamerfibrillatie” OR “VKF” |
|  | Ischemic heart disease coded | ICPC-2 code K74 OR K75 OR K76 |
|  | Ischemic heart disease free text | “angor” OR “ischemie” OR “infarct” OR “myocardinfarct” OR “hartinfarct”  NOT: “cerebrale ischemie”, “cerebrovaculaire ischemie”, “retina ischemie”, “N. opticus ischemie”, “ruggenmergischemie”, “ischemie van de ledematen”, “nierinfarct”, “cerebellair infarct”, “cerebraal infarct”, “herseninfarct” |
|  | Valvular heart disease coded | ICPC-2 code K83 |
|  | Valvular heart disease free text | “stenose” OR “insufficiëntie” OR “klep” OR “kleplijden”  NOT: “spinaalkanaalstenose”, “dacryostenose”, “urethrastenose”, “anale stenose”,” nierarteriestenose”, “A. Renalisstenose”, “cervixstenose”, “oesophagusstenose”, “nierinsufficiëntie”, “veneuze insufficiëntie”, “arteriële insufficiëntie”, “respiratoire insufficiëntie”, “acute bijnierinsufficiëntie”, “ovariuminsufficiëntie”, “kleptomanie” |
|  | Hypertension complicated coded | ICPC-2 code K87 |
|  | Cardiomyopathy free text | “cardiomyopathie” OR “CMP” |
|  | Congenital anomaly cardiovascular coded | ICPC-2 code K73 |
|  | Congenital anomaly cardiovascular free text | “ASD” OR “VSD” OR “septumdefect” OR “fallot” |
| HF symptoms and signs | | |
|  | Edema lung free text | “longoedeem” |
|  | Edema free text | “oedeem”  NOT: “angioneurotisch oedeem”, “angiooedeem”, “Quincke’s oedeem”, “lymfoedeem”, “scrotaal oedeem”, “allergisch oedeem”, “oedeem van Reinke” |
|  | Orthopnea free text | “orthopnee” |
|  | Dyspnea free text | “inspanningsdyspnee” OR “dyspnee d’effort” |
| HF medication (all searched without time limit AND prescribed last 6 months AND last 12 months) | | |
|  | ACE-I AND diuretics | Medication group/ATC code: “ACE-I” OR “ACE-remmers” AND “diuretics” |
|  | ACE-I AND β-blockers | Medication group/ATC code: “ACE-I” OR “ACE-remmers” AND “β-blockers” |
|  | Β-blockers AND diuretics | Medication group/ATC code: “β-blockers” AND “diuretics” |
|  | ARB AND diuretics | Medication group/ATC code: “sartaan” OR “angiotensin-II-antagonisten” AND “diuretics” |
|  | ARB AND β-blockers | Medication group/ATC code: “sartaan” OR “angiotensin-II-antagonisten” AND “β-blockers” |
|  | Digoxine and derivates | Medication group/ATC code: “digoxine en derivaten” OR “hartglycosiden” |
|  | MRAs | Medication group/ATC code: “Potassium-sparing diuretics” |
| HF, heart failure; EMHS, electronic medical health system; ICPC-2, international classification primary care second edition; ACI-I, angiotensin-converting enzyme inhibitor; ARB, angiotensin II- receptor blockers; MRA, mineralocorticoid receptor antagonist | | |

**Supplemental file 6: Quality indicators for management of adult HF patients in general practice**

|  |  |
| --- | --- |
| Quality indicators for HF management in general practice | |
| Case Finding: Quality Statement: Awareness and registration of HF diagnosis | |
|  | Process Quality Measure:   * Proportion of patients 40 years of age or older with a registered diagnosis of HF in the EHR |
|  | *Comparison to average prevalence of HF in patients aged 40 years and older: 1-2%[1]* |
| Diagnosis: Quality Statement: Diagnosis by a specialist  Adults with suspected HF should be referred to a specialist and have an echocardiogram | |
|  | Process Quality Measure:   * Proportion of patients with a registered diagnosis of HF in the EHR who have been referred to a cardiologist and have an echocardiogram |
|  | *Comparison to average GP performance (Belgium): 88% of HF patients had an echocardiogram[2]* |
| Treatment: Quality Statement: Medication for HFrEF  Adults with HFrEF should be started on low‑dose RAAS-blockade and β‑blocker that are gradually increased until the target or optimal tolerated doses are reached | |
|  | Process Quality Measures:   * Proportion of patients with a registered diagnosis of HF and reduced LVEF who are treated with RAAS-blockade/β-blocker |
| *Comparison to average GP performance (Belgium): 86% of HFrEF patients (LVEF<40) were treated with β-blockers, 71% with RAAS-blockade[2]* |
| * Proportion of patients with a registered diagnosis of HF and reduced LVEF prescribed an ACE-I/ β-blocker who are on a dose that is higher than the starting dose |
| *No comparative Belgian data available* |
| Symptomatic adults with HFrEF (LVEF≤35%) should be started on a MRA | |
|  | Process Quality Measure:   * Proportion of patients with a registered diagnosis of HF and LVEF**≤**35% who are treated with a MRA |
| *Comparison to average GP performance (Belgium): 60% of HFrEF patients (LVEF****≤****35%) were treated with a MRA[2]* |
| Management: Quality Statement: Review of stable HF patients  Adults with stable chronic HF have a review of their condition at least every 6 months | |
|  | Process Quality Measure:   * Proportion of patients with a registered diagnosis of HF who consulted their GP at least once in the past 6 months |
|  | *No comparative Belgian data available* |
| HF management should employ a multidisciplinary approach involving among others cardiologists, HF nurses and primary care physicians. | |
|  | Process Quality Measure:   * Proportion of patients with a registered diagnosis of HF who consulted a cardiologist at least once in the past 18 months |
| *Comparison to average GP performance: 53% of HF patients consulted a cardiologist in the past 12 months[2]* |
| HF, heart failure; EHR, electronic health record; GP, general practitioner; HFrEF, heart failure with reduced ejection fraction; RAAS-blockade, renin-angiotensin-aldosteron-system-blockade; LVEF, left ventricular ejection fraction; MRA, mineralocorticoid receptor antagonist | |

**References**

1. Mosterd A, Hoes AW. Clinical epidemiology of heart failure. *Heart* 2007,**93**:1137-1146.

2. Smeets M, Aertgeerts B, Henrard S, Vaes B. Identification of heart failure patients through an extensive search in the electronic medical health system. *under construction* 2016.

**Supplemental file 7: Example of feedback report to practices**

Heart failure care report

# Case finding: Detection of heart failure patients

GMD population last 2 years: n=4816

Patients with GMD and ≥40 y: n=2446

Prevalence HF: 1,6%

Patients with a registered HF diagnosis in EHR n=39

Mean prevalence:

1-2%

After extended audit

Prevalence HF: 1,8%

Patients with a HF diagnosis appointed by GP n=43

# Diagnosis of heart failure

95 % of the patients with a HF diagnosis appointed by GP received an echocardiography during the last 5 years

* 37 % HFrEF patients (EF<40) (n=16)
  + 9/16: recuperated EF
* 9% HFmrEF patients (EF 40-50) (n=4)
* 49% HFpEF patients (EF >50 + diastolic dysfunction) (n=21)
* 4.6% Not-classifiable (n=2)

Mean: 88% of the HF patients received an echocardiography during the last 5 years

Objectified diagnosis?

* 91% (n=39) HF diagnosis according to ESC guidelines
* 7% (n=3) doubt about HF diagnosis
* 2% (n=1) no objectified HF diagnosis, no echocardiography in file

Action: Planning: “Diagnosis HF: Objectify diagnosis (NT-proBNP/echocardiography)

# Treatment of heart failure

Patients with EF<40

* B-blocker: 81% *(mean 86%, Hirt et al: 78%)*
  + Dose higher than starting dose: 75%
  + Target dose reached: 6% *(Hirt et al: 46%)*
* RAAS-blockade: 87% *(mean 71%, Hirt et al: 81%)*
  + Dose higher than starting dose: 75%
  + Target dose reached: 44% *(Hirt et al: 62%)*

Patients with EF≤35

* MRA: 50% *(mean 60%, Hirt et al: 34%)*

All HF patients

* Loop diuretics: 53% *(mean 42%)*

# Characteristics of patients with Heart failure

Hospitalisation last 3 years

* “All-cause” hospitalisation: 79%
* Cardiovascular hospitalisation: 37%
* HF hospitalisation: 33%

Number registered chronic problems

* Mean: 7/HF patiënt

Number chronic prescriptions

* Mean: 9/HF patiënt

# Follow-up

# Follow-up

98% patients with a diagnosis of HF consulted their GP in the past 6 months

81% patients with a diagnosis of HF consulted a cardiologist in the past 18 months

**Supplemental file 8: Minnesota Living with Heart Failure Questionnaire (MLHF-Q)**

**Vragenlijst: Leven met hartfalen**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| De volgende vragen gaan over de mate waarin uw hartaandoening ertoe geleid heeft dat u de afgelopen maand anders leefde dan u wilde. Als u zeker weet dat een bepaalde vraag niet op u van toepassing is of niets met uw hartklachten te maken heeft, zet dan een kruis bij ‘nee’.  Is de vraag wel op u van toepassing, zet dan een kruisje bij het antwoord dat het best op u van toepassing is. Het is de bedoeling dat u alleen aan de afgelopen maand (4 weken) denkt. | | | | | | |
| Hebben uw hartklachten ertoe geleid dat u de afgelopen maand anders leefde dan u wilde, doordat: | | | | | | |
| *Nauwelijks In hoge mate* | | | | | | |
|  | *nee* |  | | | | |
|  | 0 | 1 | 2 | 3 | 4 | 5 |
| 1. u last had van gezwollen enkels, benen, enz.? |  |  |  |  |  |  |
| 2. u overdag moest gaan zitten of liggen om te rusten? |  |  |  |  |  |  |
| 3. u moeite had met wandelen of trappen lopen? |  |  |  |  |  |  |
| 4. u moeilijk in huis of in de tuin kon werken? |  |  |  |  |  |  |
| 5. u moeilijk van huis kon? |  |  |  |  |  |  |
| 6. u ’s nachts niet goed kon slapen? |  |  |  |  |  |  |
| 7. uw omgang met vrienden of familie bemoeilijkt werd? |  |  |  |  |  |  |
| 8. u niet volledig meer in staat was om de kost te verdienen? |  |  |  |  |  |  |
| Hebben uw hartklachten ertoe geleid dat u de afgelopen maand anders leefde dan u wilde, doordat: | | | | | | |
| 9. het moeilijk voor u was om aan sport te doen of om zich aan uw hobby’s of andere vrijetijdsbesteding te wijden? |  |  |  |  |  |  |
| 10. uw seksuele activiteiten bemoeilijkt werden? |  |  |  |  |  |  |
| 11. u minder at van het voedsel dat u lekker vindt? |  |  |  |  |  |  |
| 12. u last had van kortademigheid? |  |  |  |  |  |  |
| 13. u moe of uitgeput was of weinig energie had? |  |  |  |  |  |  |
| 14. u in een ziekenhuis moest worden opgenomen? |  |  |  |  |  |  |
| 15. u kosten hebt moeten maken in verband met medische verzorging? |  |  |  |  |  |  |
| 16. u last had van bijwerkingen van medicijnen? |  |  |  |  |  |  |
| 17. u het gevoel had dat u uw familie of vrienden tot last was? |  |  |  |  |  |  |
| 18. u het gevoel had minder vat op uw leven te hebben? |  |  |  |  |  |  |
| 19. u zich ongerust maakte? |  |  |  |  |  |  |
| 20. u zich moeilijk kon concentreren of dingen kon onthouden? |  |  |  |  |  |  |
| 21. u zich depressief voelde? |  |  |  |  |  |  |

**Supplemental file 9: NT-proBNP POCT registration form for GPs**

Symptoms: dyspnea: yes/no

Fatigue: yes/no

Ankle edema: yes/no

Other: if yes, which?………………………………

Duration of symptoms: < 6 hours (omcirkel wat past)

6 hours – 24 hours

24 hours-3 days

3 days-1 week

>1 week

Current treatment: Loop diuretics: yes/no

ACE-inhibitor: yes/no

Calcium antagonist: yes/no

B-blocker: yes/no

Motivation for test:.................................................................................................

Result NT-proBNP POC test:..................................................................................

Working diagnosis: hartfalen? yes/no Alternative diagnosis? ..........................

Treatment:

Referral echocardiography: yes/no

Referral emergencies: yes/no

Other referral: yes/no if yes, which? ………………………………………….

Treatment: yes/no

which R/?: ....................

What was the added value of this test in this patient?

No added value Large added value

**Supplemental file 10: Registration form for GPs after referral of a patient to the HF nurse**

**What is the impact of the HF nurse intervention on your patient/your management?**

This intervention had an added value on…. *(Muliple answers are possible, tick what applied to your patient)*

Patient education…..…………………………………………………………………………………………………………

Education of patients’ caregiver………………………………………………………………………………………

Education of nurses (long term care home/home-bound nurses)…………………………………..

Advice in heart failure diagnosis………….…………………………………………………………………………..

Referral for echocardiography/cardiologist……………………………………………………………………..

Advice about using diuretics flexibly……………………………………………………………………………….

Optitration of medication………………………………………………………………………………………………….

Start new medication………………………………………………………………………………………………………..

Referral for device therapy……………………………………………………………………………………………...

Other………………………………………………………………………………………………………………………………..

To what extent this intervention had an added value for your patient’s quality of care? *(only tick the boxed of interventions that have took place)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | *Hardly A lot* | | | | |
| Education |  |  |  |  |  |
| Advice in diagnosis |  |  |  |  |  |
| Advice in treatment |  |  |  |  |  |
| Follow-up after hospitalisation |  |  |  |  |  |

Comments: