

Telemedicine and blood collection session supervision by a nurse in France

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I, acting as Speaker declare that

in the exercise of my function and for this event, I AM NOT acting under my own or other's commercial interests or those of third parties and that any relationships I have had in the last two years with subjects with commercial interests are not such as to allow these subjects to influence my functions in order to take advantage of them.

EFS

Created on January 1, 2000 the French Blood Establishment (EFS) is the sole civilian operator of blood transfusion in France. The EFS is in charge of blood donation, plasma donation and platelet donation

Placed under the supervision of the Minister in charge of Health, the EFS is a public establishment of the State.

The EFS is made of 13 regional blood transfusion establishments, which are responsible for the collection, preparation, qualification, immuno-hematology and distribution of blood products to hospitals and clinics. .

There are 120 collection sites and 40,000 mobile collections.

The primary public service mission of the EFS, consists of ensuring France's self-sufficiency in blood products under conditions of optimal safety and quality.

The EFS also ensures the supply of plasma to the French Fractionation and Biotechnologies Laboratory (LFB), which manufactures blood-derived medicines.

EFS carries out therapeutic and research activities in innovative fields, such as cell and tissue engineering and therapy.

TELEMEDICINE: CONTEXT AND LEGAL FRAMEWORK



REPORT

- The physician shortage forces sites to cancel collections
- Medical care for donors remains exceptional : 6 serious adverse reactions per month and per region including one emergency call
- Nurses' involvement in donors selection since 2017
- Well trained teams in first aid gestures
- A system widely deployed in European countries



OBJECTIVES

- **Maintain and even increase collection capacity and ensure self sufficiency in safe blood and blood products**



SOLUTION

- A system with telemedicine including :
 - **Available physicians offsite on the phone**
 - **A new role for nurses : the supervision of collection**

A POSITIVE ENVIRONMENT FOR TELEMEDICINE : THE PRE-DONATION INTERVIEW REALISED BY NURSE

Valuation of the nurses

It increases skills and autonomy for nurses. It consolidates the link between physicians and nurses.

Training

A solid national training is in place combining theoretical training and practical support under the supervision of a physician (100 interviews required to practice)

Gradual deployment

Deployment organized in two stages to ensure no significant different in deferral rate and donor adverse events.

Two years of experimentation with shared practice meeting including health authorities.

Routine deployment has been authorized since the publication of decree 2017-309, 03/11/2017.

At the end of the year 2023 :

- 52% of collections benefit from nurses realising interviews
- 50 physicians off site, 120 nurses doing supervision

CURRENT SITUATION AND RISK ANALYSIS



Blood collections : key features



Serious adverse reactions

40 000 Collections per year in France

2 500 000 Whole blood donations per year

10 Regional establishments
- between 130 000 et 360 000 donation per year

A retrospective study was carried out over the period from 01/01 to 06/30/2018 (1.25 million donations):

- **6 serious adverse reactions per month and per establishment;**
- **<1 emergency call per month per regional establishment.**

Serious adverse reactions	372
Vasovagal reactions	351
With trauma	24
Without trauma	327
Emergency call	42
Hospitalisation	11

TELEMEDICINE IN COLLECTION HAS ALREADY BEEN SUCCESSFULLY TESTED IN OTHER COUNTRIES

- Australia ;
- Norway (for 30 years) ;
- Sweden (for 30 years) ;
- Scotland ;
- Ireland (for 3 years) ;
- Hungary ;
- North Ireland;
- New Zealand;
- Wales (for 15 years);
- Establishments from states of the USA : ABC, ARC, BSI ;
- Austria.

No impact on deferral or serious adverse events.

FRAMEWORK OF THE PROJECT



Mains issues of the project:

- Strong career possibilities for nurses and physicians
- Practical training issues for teams using new tools
- Support for change implying training, management communication and general communication.



Roadmap and action plan

- Regulatory development
- Training plan based on scenarios and role play
- Change support plan for teams

A CHANGE IN THE REGULATIONS IN COLLABORATION WITH THE HEALTH AUTHORITIES THEN MADE IT POSSIBLE TO AUTHORIZE AND IMPLEMENT TELEMEDICINE AND NURSE COLLECTION (OF BLOOD DONATION) SESSION SURPERVISION



Publication of the decree of 02/15/2019 opening and regulating telemedicine in blood collection.



Publication of the decree of 06/27/2019 specifying the conditions under which communication is organized between the teams and the physician.

TELEMEDICINE IS CHARACTERIZED BY THE CREATION OF NEW POSTS OF PHYSICIAN OFFSITE AND NURSES SUPERVISING THE COLLECTION

- The organization of the collection remains unchanged with the main four steps : reception, interview, blood donation, collation
- Collections remain the responsibility of the head of the department
- Two new roles are emerging : physician offsite and nurses supervising the blood session

New roles in telemedicine

Roles with the presence of the physician at the site collection

telemedicine



Coordinate the collection process



Nurses supervising the collection



Briefing and debriefing



Nurses realizing briefing and debriefing



Donors interviews (selection)



Nurses realizing the donors interviews

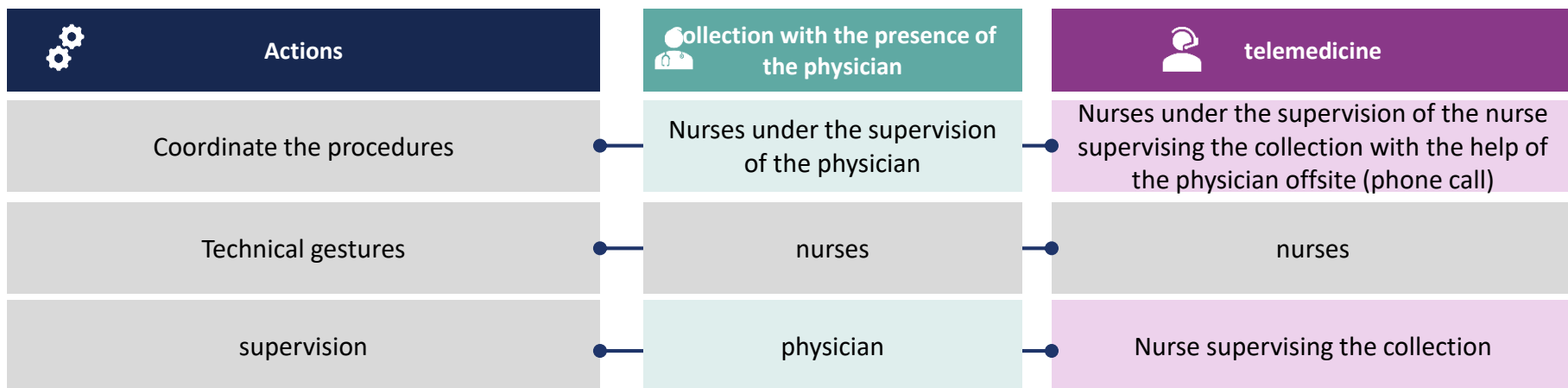


Medical relay for the teams

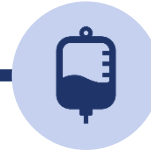


Physician offsite

Collection management and donor medical care in case of serious adverse event



TEAMS CAN CONTACT THE PHYSICIAN (BY PHONE CALL) AT ANY TIME FOR MEDICAL PURPOSE



1. Donor interview

Transfusion practices

Donors 66 years old
First donors > 60 years old.

In the absence of clear reason for deferral, the nurse realising the interview contacts the physician offsite

2. Medical questions

Internal guidelines

During the interview, the nurse can contact the physician by phone in case of doubt or question to obtain advice.

3. Serious adverse event

procedures

In case of serious adverse event, the teams must contact the physician (physician off site or emergency doctor)

4. Other questions

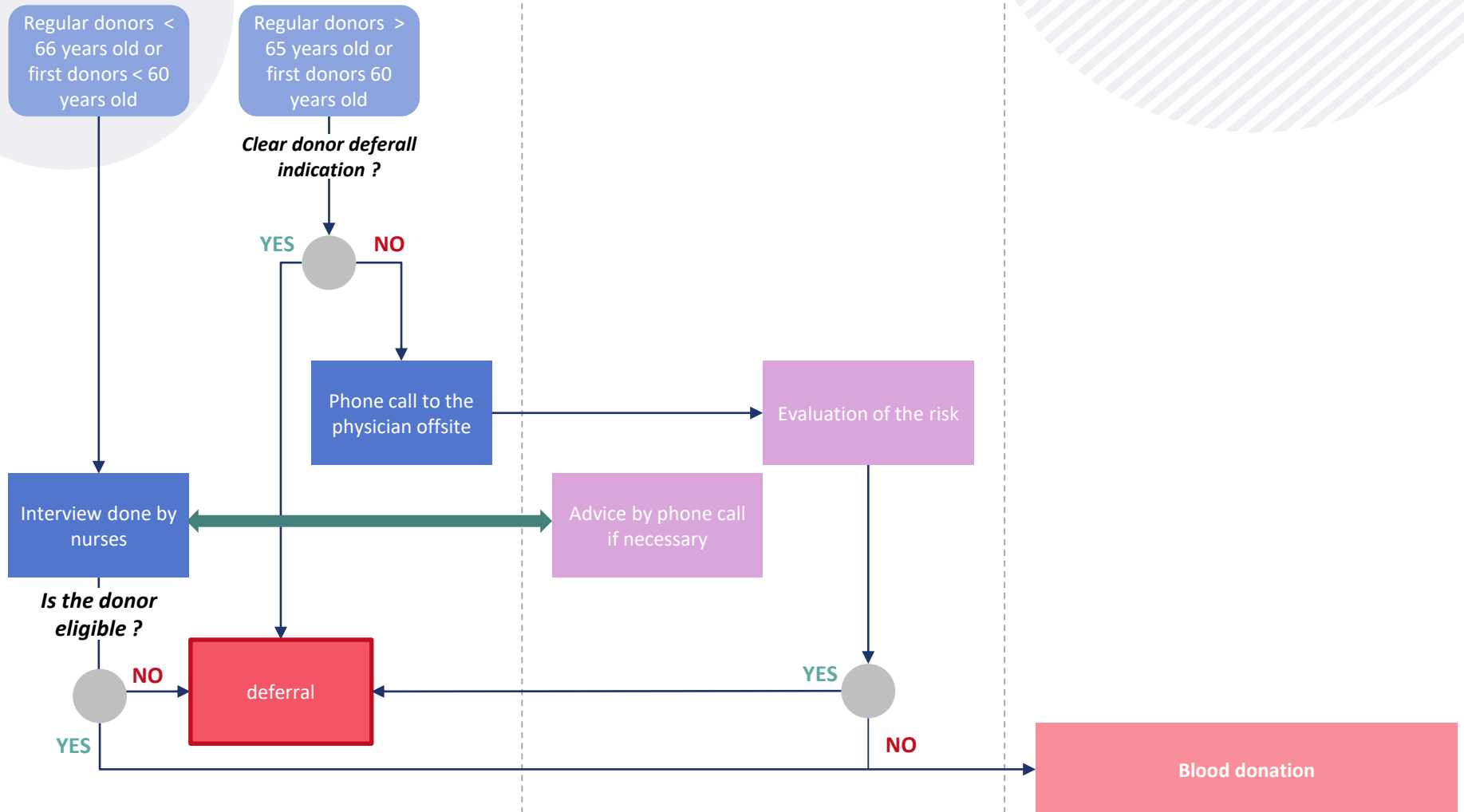
For all other medical questions, the teams can contact the physician

TELEMEDICINE : THE DONOR INTERVIEW

Missions of nurses realising the interview

Missions of the physician offsite

Missions of the nurses



TELEMEDICINE : TECHNICAL AND LOGISTICAL TOOLS

Communication between the physician (offsite) and the teams is managed by **call management software** that allows call to be routed to the physicians, as a priority in the region. The team has two telephone numbers to dial depending on the type of call : medical question during the interview or donors serious adverse reaction .



Doctor offsite

The physicians offsite are equipped with smartphones, PC.



*Nurses
(interviews)*

Smartphone for each nurse realising the interview.



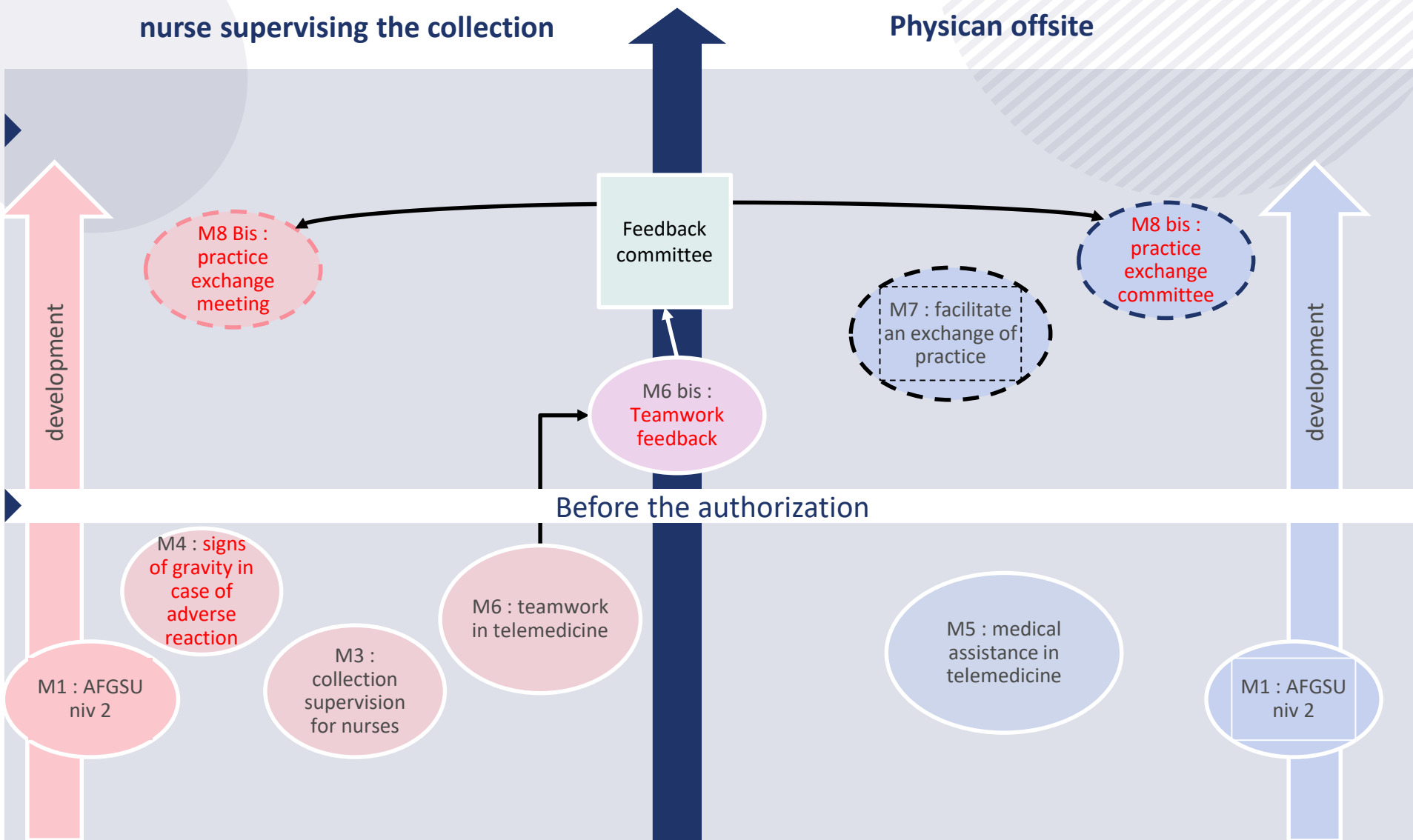
team

Smartphone in emergency bag

A ROBUST TRAINING PLAN IS PERFORMED IN ORDER TO ACCOMPAGNY THE CHANGE AND TO TRAIN TEAMS IN THEIR NEW ROLES

nurse supervising the collection

Physican offsite



COMPLEMENTARY CHANGE SUPPORT SYSTEM



Social dialogue to inform



Specific support for local managers



Service meetings in each sites



Creation of professional networks to facilitate exchanges



An organization of meetings between national and regional establishments



Important Communication project in supporting change involving all actors and partners.

A STRUCTURED EVALUATION PROTOCOL TO EVALUATE THE PROJECT THROUGHOUT ITS DEPLOYMENT

Evaluation reports are planned at key project milestones

This evaluation is structured by a global frame of reference build around 4 evaluative axes :

- **Deployment of telemedicine**
- **Preservation of autosufficiency**
- **Security for donors**
- **Adherence of the teams to the project**

A MODEL OF TELEMEDICINE VALIDATED IN ITS ORGANIZATION

- › **Team support of the project is confirmed : telemedicine is in place in more than 70 sites in France**
- › **The training course is relevant**
- › **Telemedicine does not complicate the organization of collections and efficiency is preserved.**
- › **No deterioration of the management of serious adverse event.**
- › **Slight increase in the deferral rate**
- › **The time spent on calls by physicians offsite allows them to carry out ancillary tasks without impacting their responsiveness**

Thank you for your attention

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