



How to ensure low deferral rates?

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Also on behalf of DOMAINE, and the EBA workshop Donor deferral

On-site donor deferral : a delicate balance

For the donor :

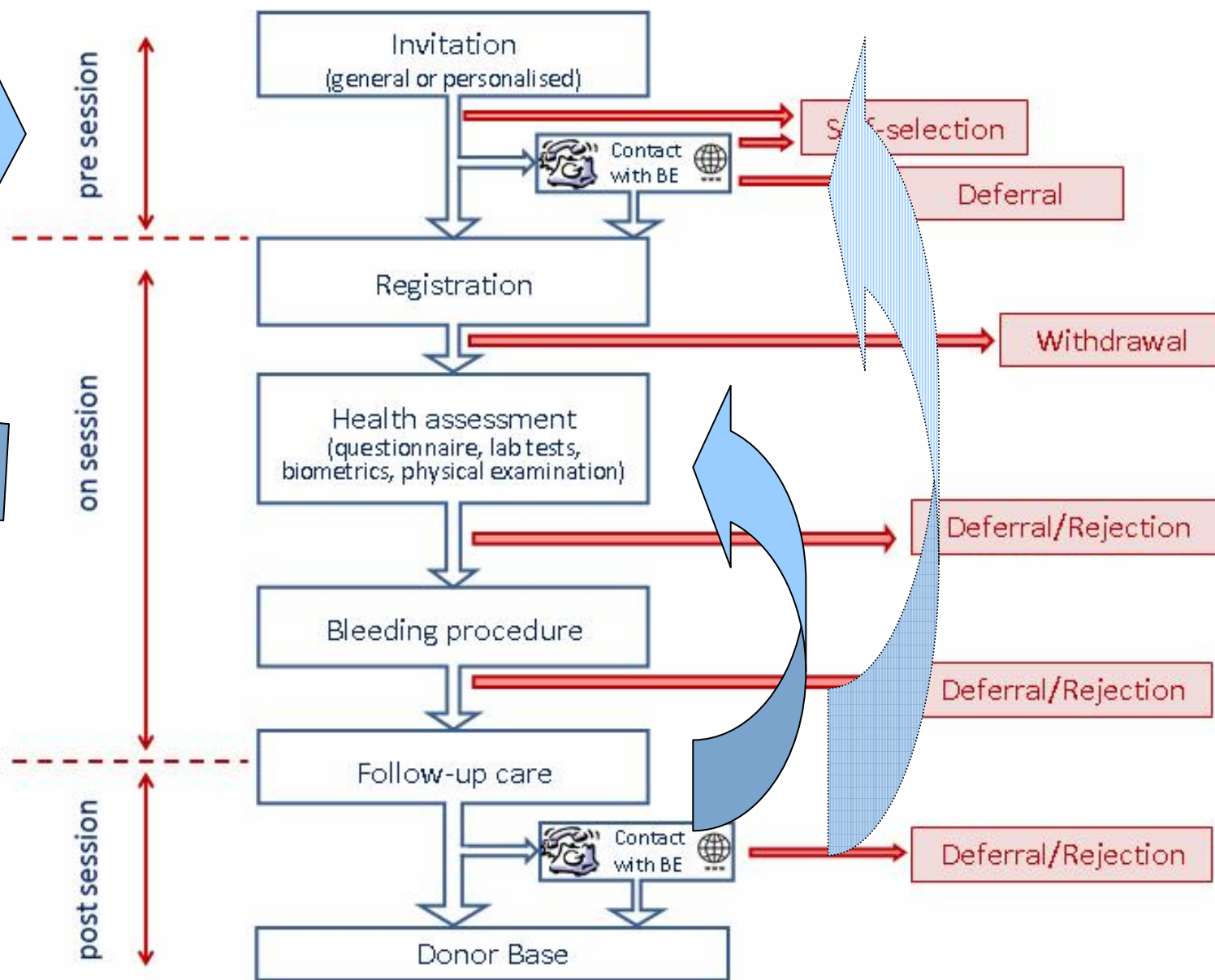
- Disappointment, and reluctance to donate again.
- insecure or worried over health issue
- Extra time and travelling costs
- Negative promotion

For the Blood Bank :

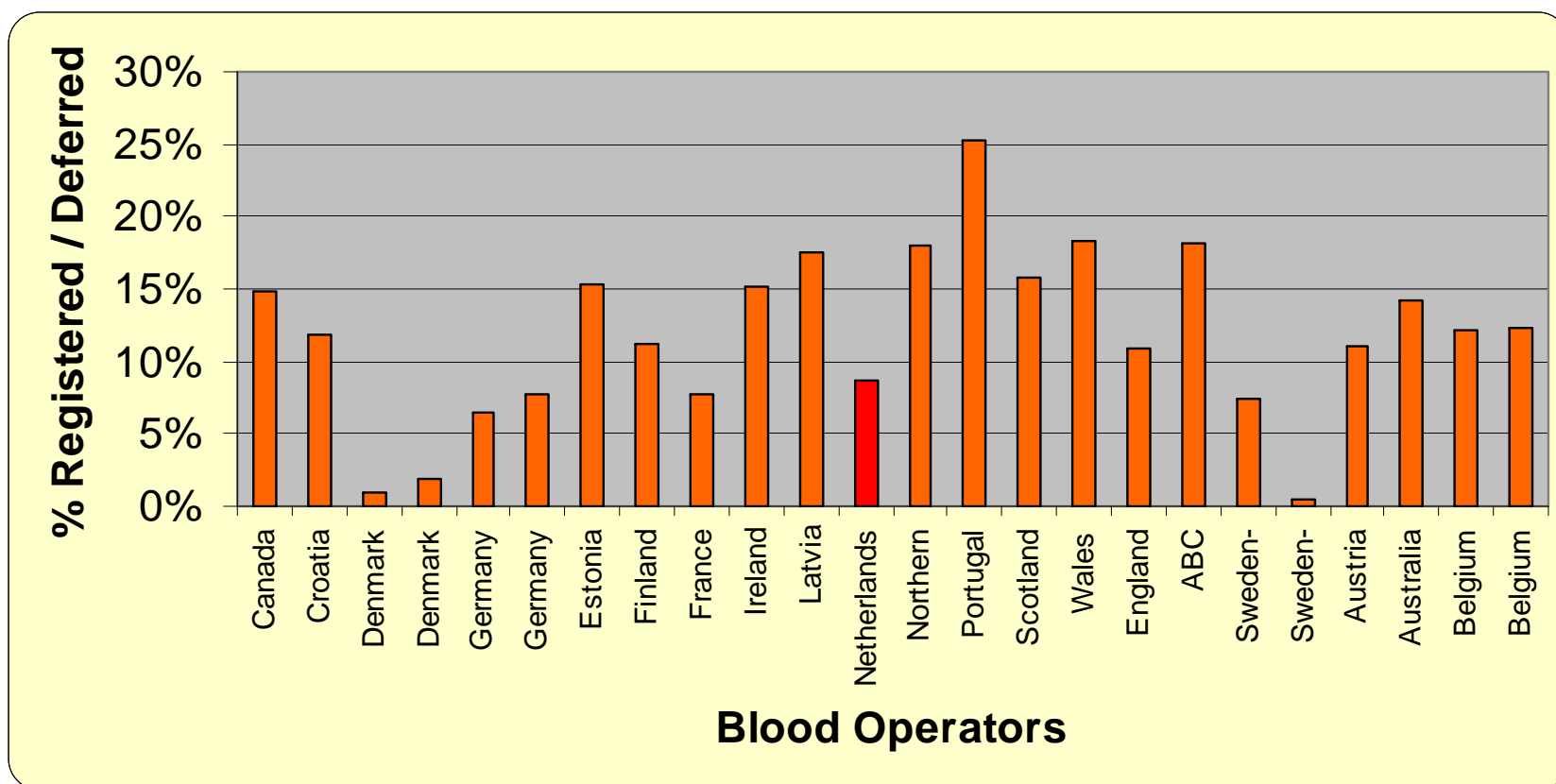
- Negative impact on donor retention and thus on loyal donor base
- Inefficiency in the logistics of the donor center
- Recruitment costs



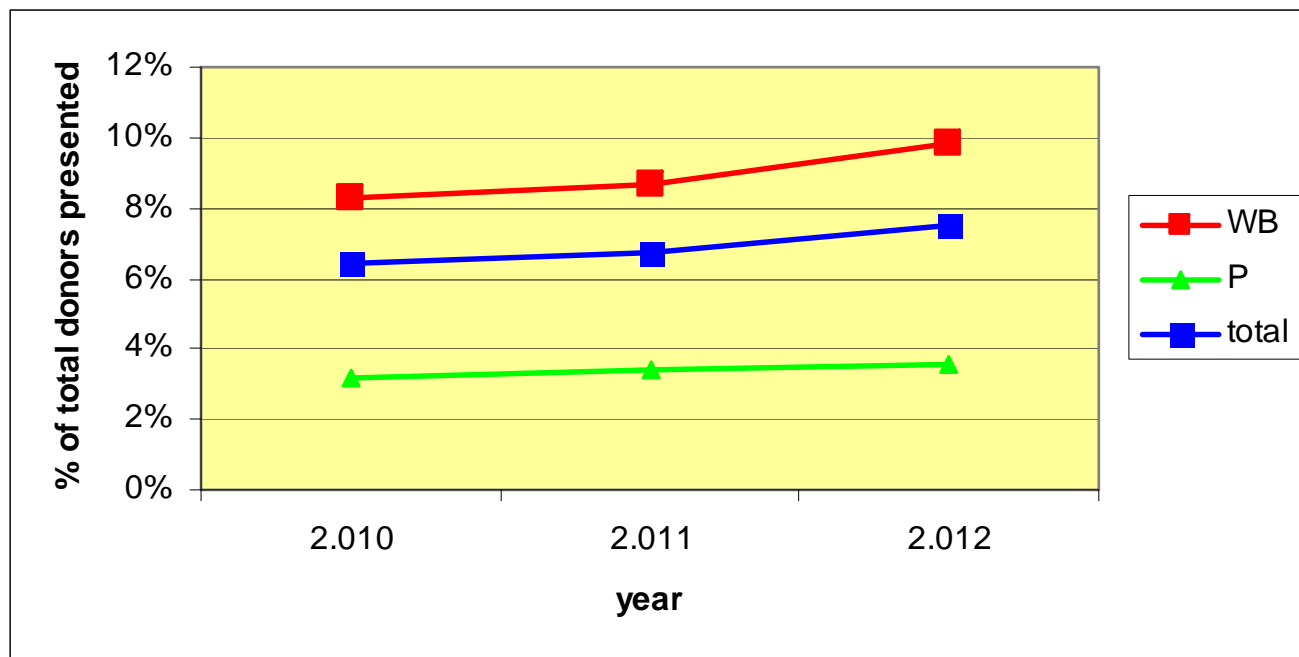
Deferrals in the process of donation



DOMAINE survey 2010/11 on on-site deferrals



Sanquin on-site deferral rates for donors



Understanding donor deferral rates : what do they tell?

Conditions :

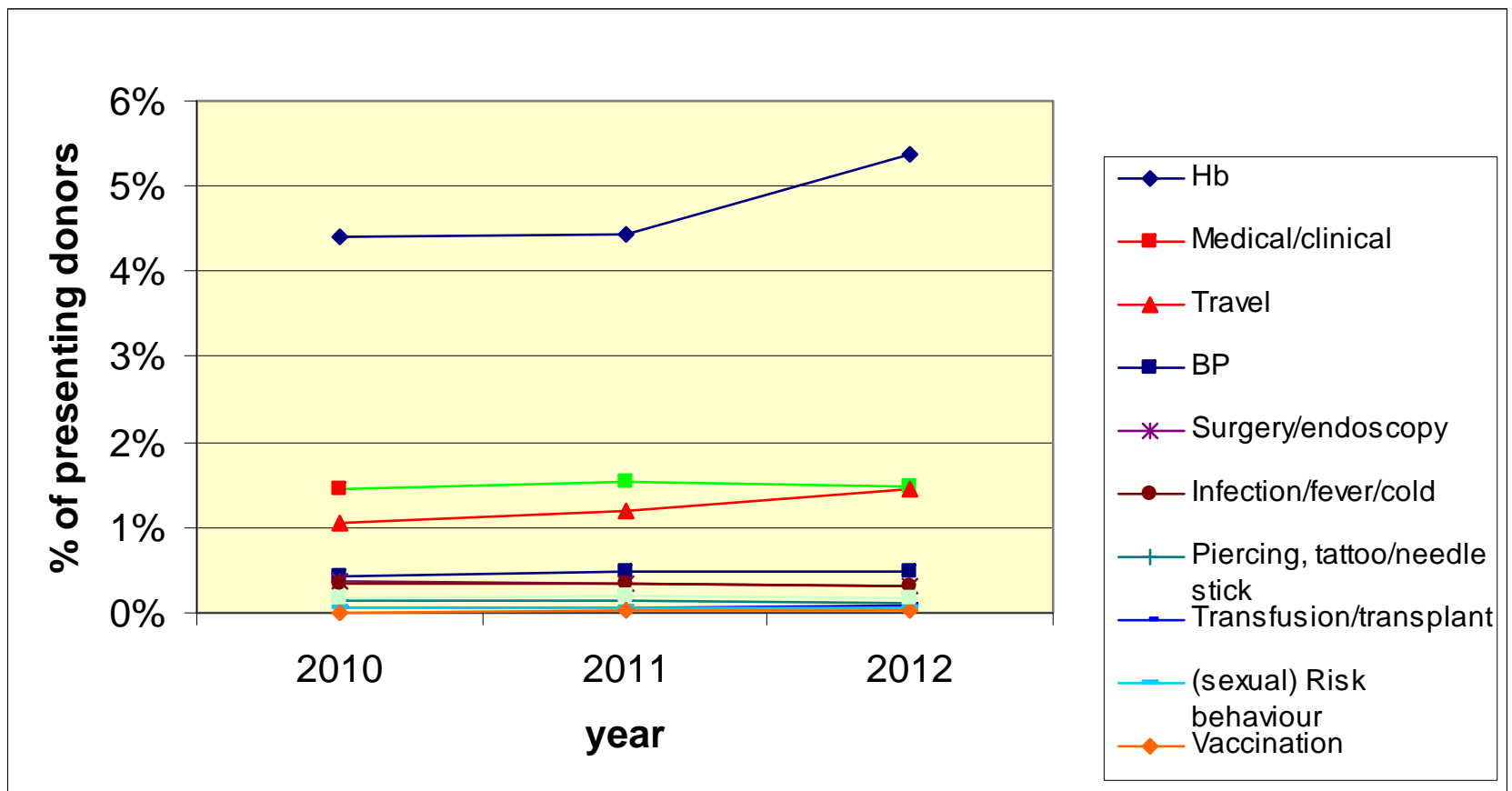
- Well defined and harmonized definitions of the data
- Coding of the different phases of deferral and the deferral reasons
- Insight in the work process of a Blood Establishment

Benchmarking :

- Within one BE the collected data have to be monitored over time
 - Early warning of deviations
 - Critical Performance indicators
 - Evaluation of interventions
- Compare data among collection sites
- Compare data among different type of collaborators
- Evaluation of the economy of the BE in comparison with other BE :

Best Practices

On-site deferrals Sanquin 2010-2012



Top 5 on-site deferral reasons (WB)

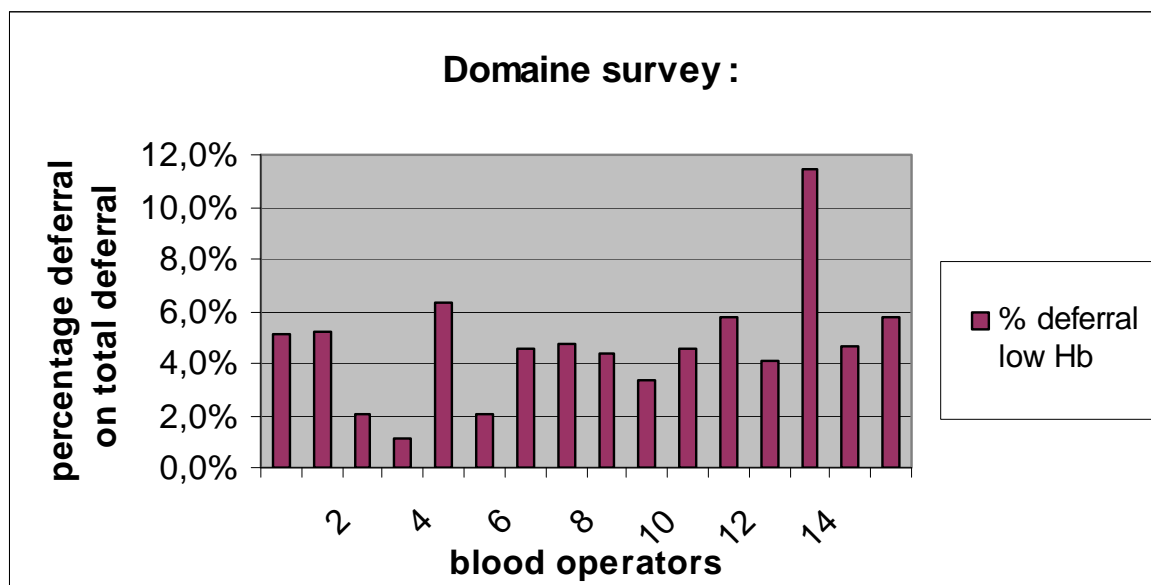
	Sanquin	DOMAINE Survey	US REDS II : custer e.a. 2012	DOMAINE : country I	DOMAINE: country II
1	Low Hb	Low Hb	Low Hb	Low Hb	Medical/clinical
2	Medical/clinical	other	Medical/ clinical	Infection/fever /cold	Low Hb
3	Travel	Medical/Clini cal	Other	Travel	Infection/fever/cold
4	BP	Infections/ fever/cold	Travel	Piercing/ tattoo/blood	Surgery/endoscopy
5	Surgery/endosco py	Travel	BP	Medical/clinic al	Piercing/ tattoo/blood
Overall	8.6%	9,4%	12.31%	6.8%	17.9%



Iron status

Major differences in deferral rate for low Hb

- Differences in cut off rates
- Difference in cut-off for Male and Female?
- Differences in donation frequencies
- Different methods to measure Iron status?



Research on Iron status blood donors

- Hb taken from capillary blood has a larger variability than HB taken from Venous blood¹
- The Hb value measured with a Hemocue has a standard deviation of +/- 0,2mmol/L²
- Hemoglobin value is a late marker for iron depletion, and is a poor surrogate for Iron condition of the donor³
- An average Whole Blood donation “costs” the donor \pm 250 mg Fe, taken from a total body Iron of \pm 1-1,5 gram
- Frequent blood donations deprive donors of Iron reserves and will lead to subclinical anemia in some cases.⁴

1 Tong e.a. Capillary and venous hemoglobin levels in blood donors Vox Sanq 2010 -5 -98-547

2 Hemocue Data management Update 2008

3 Simon TL, e.,a. Iron stores in blood donors JAMA 1981;245 2-38

4 Cable RG, e.a. NHLBI REDS II Donor iron status Evaluation study Transfusion 2012;52:702-11

How to minimize deferral for low Hb?

Challenge :

- How to recognise blood donors that are at risk of becoming anaemic in time?
- How to reduce the on-site deferrals?

1. Prevent chronic iron depletion from frequent blood donations

Validated prediction model assesses donor risk for low Hb levels :

- Relevant factors ;sex, age, season, previous Hb, difference in Hb, frequency, and number of WB donations in last 2 years ¹

1. Baart AM e.a. Development and validation of a prediction model for low Hb deferral in a large cohorts Whole blood donors Transfusion 2012

2. Develop an alternative test to measure Iron status donors

- Red cell indices,
- Ferritin
- Transferrin /sTfR
- **Zincprotoporphyrin (ZPP)**

ZPP detects iron deficiency in early stage, is easy to perform for capillary blood against limited costs ¹

3. Educate donors on healthy live style aspects

- To replace Iron lost a donor needs 30-50 days Fe intake to recover depending a.o. on nutrition

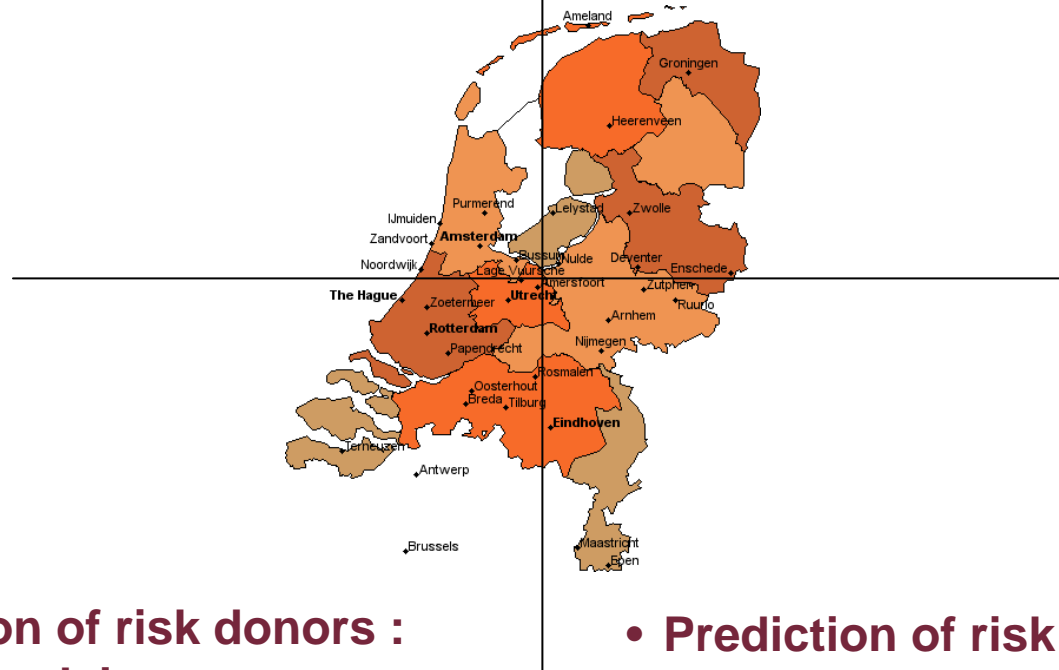
Ergo : educate donor and/or supply Fe

1. Baart e.a. ZPP levels have added value in the prediction of low hemoglobin deferral in Whole blood donors; Transfusion 2012

Sanquin Impact study to reduce Hb deferral

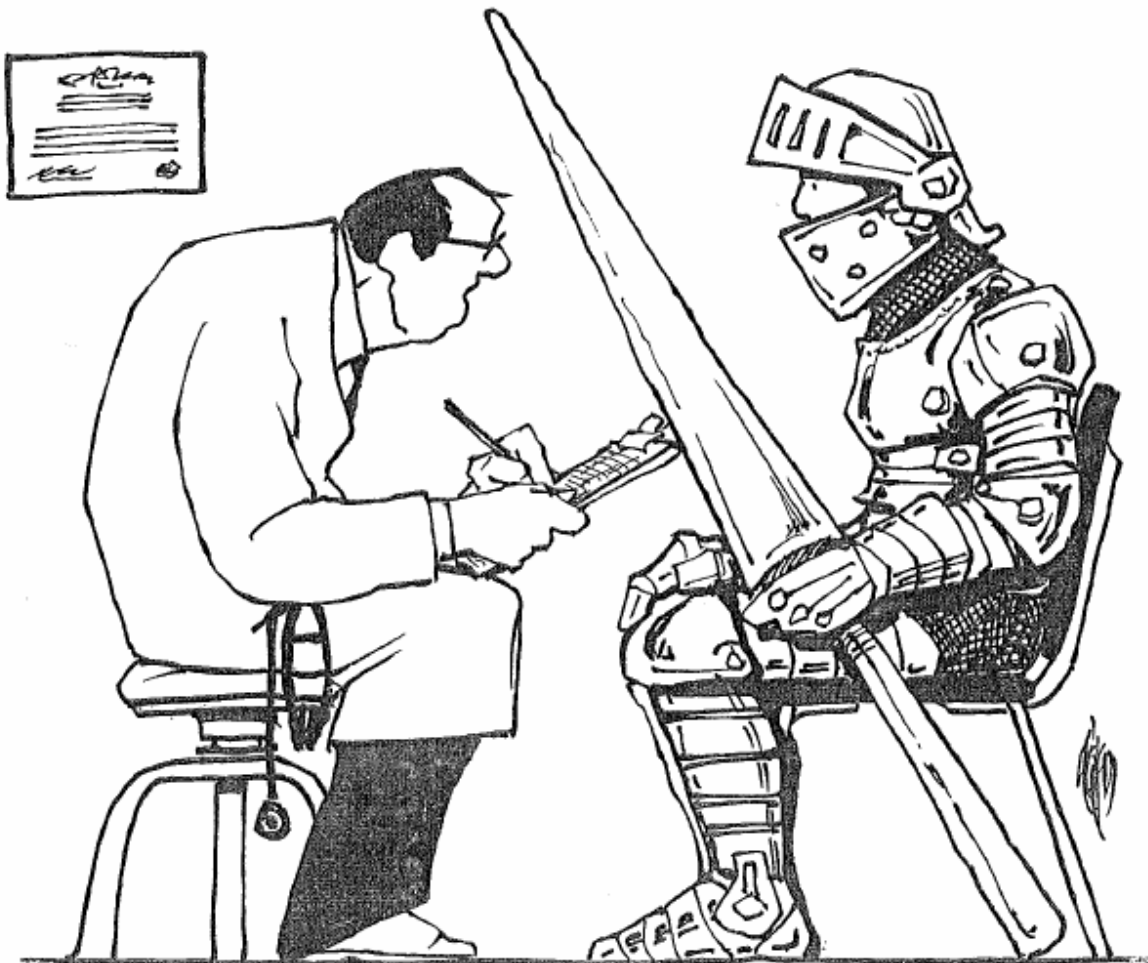
Current methods

- Prediction of risk donors :frequency



- Prediction of risk donors : nutrition advice

- Prediction of risk donors : nutrition and frequency



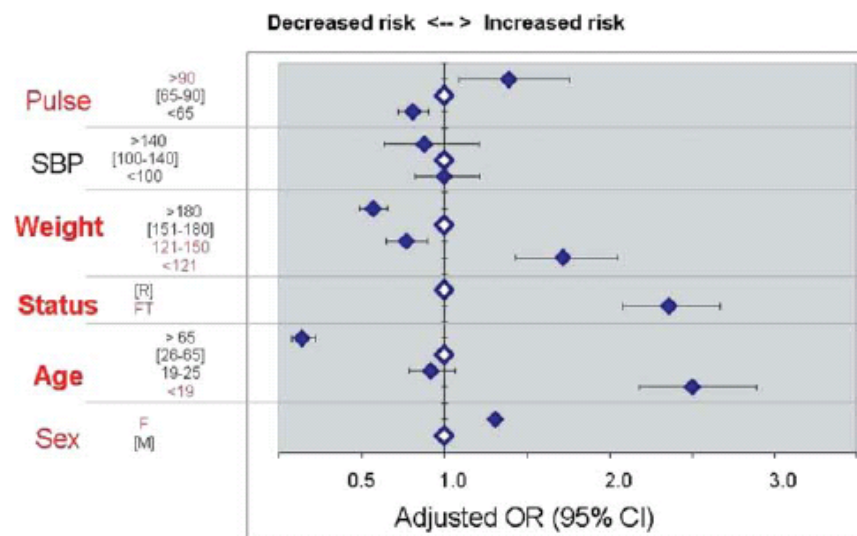
"Are you getting enough iron?"



Blood pressure

Do we really protect the donor by taking BP?

- Deferral top 5 : both to high and to low BP
- Council of Europe/ AATB guidelines do NOT require it
- BP is subjected to several variables
- Study ARC 2004 relation between hypertension and Collaps after donation ¹:

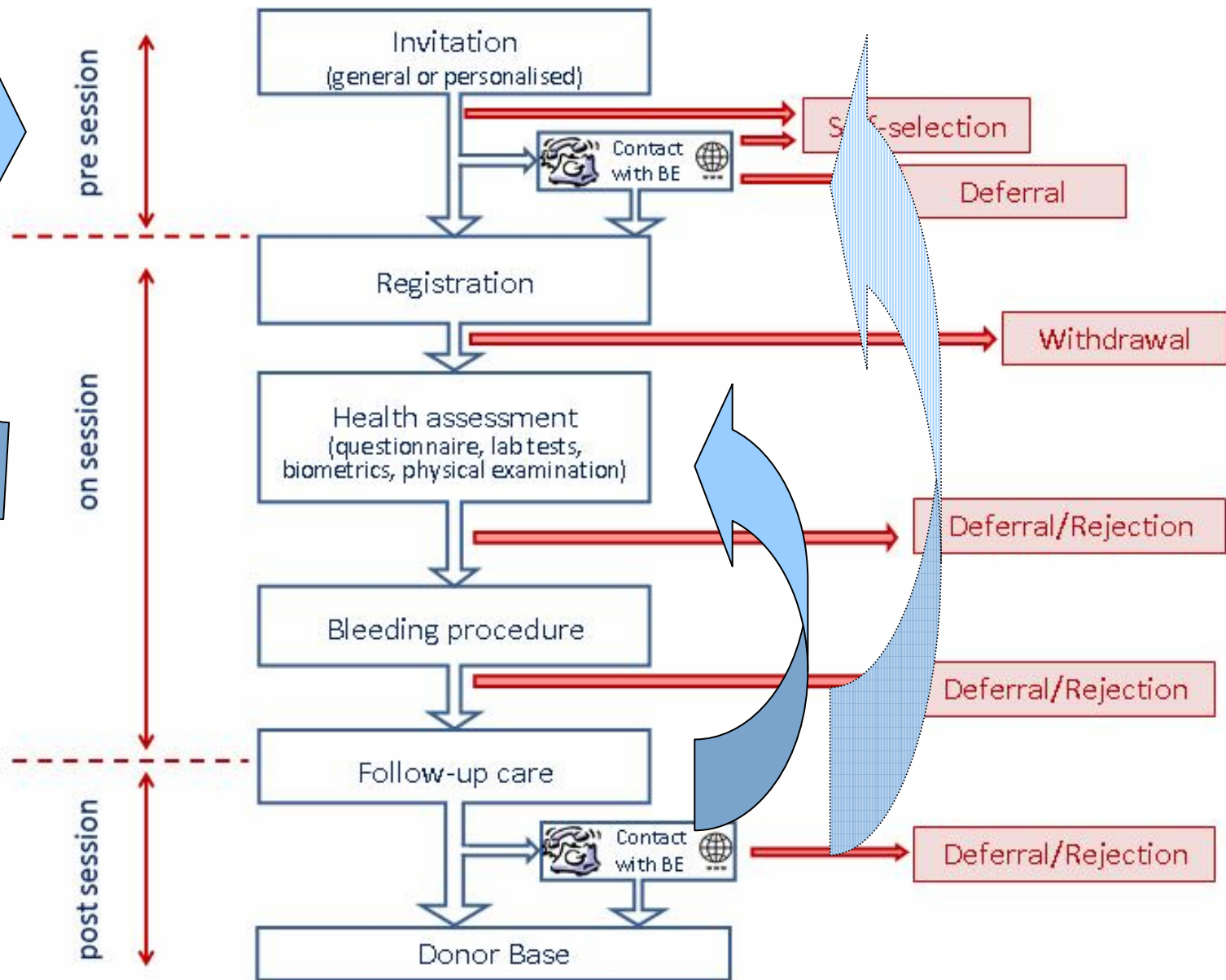


1. Eder FA, evidence –based selection criteria to protect blood donors, J of Clin Aph. 201-25:331-337



Donor selection criteria





How to optimize selection Process ?

EBA Donor Deferral workshop February 2012:

- Educate, educate, educate
- Facilitate pre-session self-deferral and self-selection
- Make it easy to make and change appointments
- Perform an evidence-based assessment of the added value of all selection criteria



Educate donor on selection criteria

- Give access to deferral reasons :
 - On website
 - Via cards
 - As an App for mobile devices
 - Through information at the collection center
- Preselection before entering Collection center :
 - Top 5 deferral reasons on invitation cards
 - Pre-selection Q on the telephone while making appointments
 - Encourage telecontact, when in doubt
 - Enable an electronic questionnaire for self check/ or as DHQ to be used later during the collection.





**BUITEN EUROPA
GEWEEST?**

DAN 4 WEKEN UITSTEL

Bij een bezoek buiten Europa geldt de nieuwe richtlijn, van (minimaal) vier weken uitstel. Doe altijd de online donortest als je wilt weten of je bloed kunt geven.

Bloed is leven

www.sanquin.nl/donortest

Bliv bloddonor
Se en tapning
Kan jeg blive bloddonor?
Specialtapning
Karantæne regler
Spørgsmål/svar
Gode råd
Brochurer
Bloddonorstudie
Donorskader
Meld flytning
Ordliste

Karantæne regler

Tip en ven | Udskriv | A A A

Karantæne regler

05/10 2011 11:58
Her er de mest gængse danske karantæne regler.

Klik på billedet for at se pjecen om karantæne regler.

Udover nedenstående liste kan du også finde karantæneperioder for alle typer medicin. Vær dog opmærksom på, at din baggrundssygdom kan gøre, at du er i karantæne i længere tid end angivet.

Her følger en alfabetisk liste over de vejledende karantæne regler. Er du i tvivl, kan du kontakte din blodbank eller skrive til [Bloddonorerne i Danmark](#). Reglerne opdateres løbende her på siden.



A B C D E F G H I J K L M N O P Q R S T V X

A

Abort

6 måneders karantæne.

AIDS/HIV

Permanent udelukkelse. Har man været udsat for mulig smitte, medfører det 6 måneders karantæne. Se også Risikobetonet adfærd og Sundhedsstyrelsens pjeces "Bloddonorer, aids og leverbetændelse".

Akupunktur

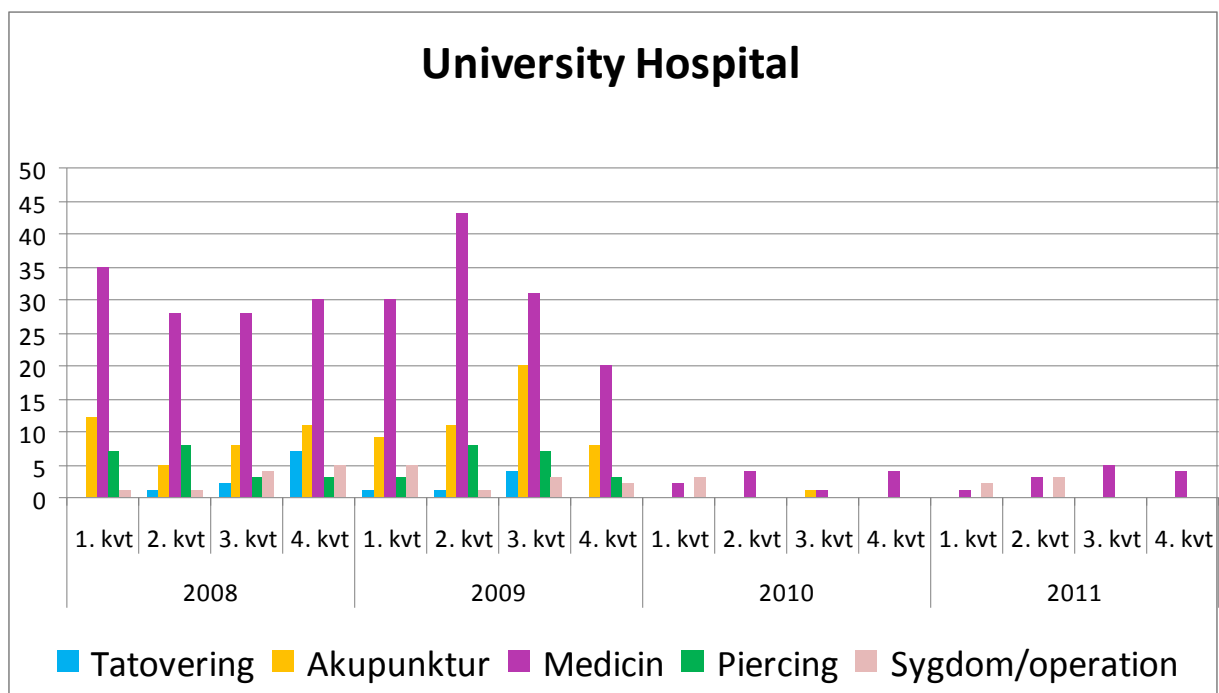
Udført af autoriseret læge med sterile engangsnåle (ikke blot superviseret), medfører akupunktur ingen karantæne. Man skal dog være opmærksom på, at årsagen til behandlingen kan medføre karantæne.

Akupunktur udført i andet regi: 4 måneders karantæne pga. risiko for overførsel af f.eks. hepatitis.

Alder

Donor skal være fyldt 17 år (17-årige skal have skriftlig tilladelse fra forældre/værge). Personer, der er fyldt 60 år, accepteres normalt ikke som nye donorer. Registrerede donorer tappes normalt ikke efter det fyldte 67. år.

Introduction of Electronic Questionnaire: Denmark



Other ways to reduce the on-site deferral

DOMAINE: DHQ varies between 10 and 65 Questions

- What is the evidence for risk reduction behind these questions?
- Are there more reliable ways to establish health risks?
- When there is uncertainty on the risks involved, donors are deferred “to be sure”
- Are all Questions really necessary?
- Have we updated the selection criteria with the current medical knowledge and technology?

Summary

- Monitor your deferral process (coding, definitions, rates, KPI)
- Benchmark your data and intervene when deviations occur
- Use prediction models to prevent excessive Iron depletion
- Implement other Iron markers to monitor donor
- Facilitate pre-session exclusion by (electronic) DHQ
- Use modern technique (apps, facebook, website) to invite, inform and educate donor
- Initiate research to establish a robust and evidence-based set of donor selection criteria

Thank you for your attention



3-5 September 2014
The Hague - The Netherlands
conference@sanquin.nl



DOMAINE

1st European Conference
on Donor Health
& Management

-  Donor Base Management
-  Donor Recruitment
-  Donor Retention
-  Donor Collection
-  Donor Health