



Action Plan for Minority Recruitment

Working towards a diverse and representative donor population

Contents

Chapter 1	Introduction.....	3
1.1	The MIMI project.....	3
1.2	What are minority groups?.....	3
1.3	Why are minority groups underrepresented in the donor base?.....	4
1.4	Why could underrepresentation be a problem?.....	4
1.5	What actions have been taken so far?.....	5
1.6	The MIMI Survey.....	5
1.7	Objectives of this Action Plan.....	6
Chapter 2	Identifying the problem.....	7
2.1	Questions to be answered.....	7
2.2	Step 1: analyse population demographics.....	8
2.3	Step 2: analyse the donor and patient population.....	9
2.4	Step 3: analyse supply and demand.....	11
2.5	Step 4: formulate the problem.....	12
Chapter 3	Setting goals.....	13
3.1	Step 1: formulate your goal.....	13
3.2	Step 2: define boundaries and constraining parameters.....	14
3.3	Step 3: perform a risk analysis.....	15
3.4	Special attention for epidemiology of blood transmissible infections.....	16
Chapter 4	Defining a strategy.....	17
4.1	Step 1: identify the relevant internal stakeholder groups within your organisation.....	17
4.2	Step 2: identify the relevant external stakeholder groups and define your target group.....	17
4.3	Step 3: engage with your target group.....	18
4.4	Step 4: inform and train your staff.....	18
4.5	Step 5: choose concrete actions.....	19
4.6	Step 6: monitor and evaluate your project's progress.....	21
Chapter 5	Knowledge and knowledge gaps.....	23
5.1	Literature.....	23
5.2	The MIMI Survey.....	24
5.3	Other sources of information.....	27
5.4	What knowledge and information is not available yet?.....	27
5.5	Concluding remarks.....	29
References.....		30

1. Introduction

In many countries, minority groups make up a growing part of the total population, while often their representation in the donor base is disproportionately low. This Action Plan offers a step-by-step approach for recruiting blood donors from these groups. It is aimed at policy makers and donor managers in blood establishments who want to investigate whether minority underrepresentation is, or will become, a problem for their organisations, and wish to take subsequent action in targeted minority recruitment. In this first chapter, we explore this relatively new field of activity and explain why this Action Plan is needed.

1.1 The MIMI project

The size, composition, and age distribution of human populations are constantly changing all over the world. In Europe, the total population is increasing¹. Migration is the main factor causing the EU population's growth. Not only recent migration, but also migration in the past century has created diversity within populations.

In 2008, 12.7% of the EU residents aged 15-74 were foreign born or had at least one foreign-born parent¹. This group may more than double and exceed 25% of the population across all ages by 2060, although this proportion may vary substantially across EU member states². Especially among young adults, an important source population for new donors, the proportion of first and second generation immigrants is projected to be far greater than today.

Inhabitants from minority groups are generally less actively involved in the blood supply than people from the indigenous population³⁻⁵. The proportion of minority donors in the donor base is low compared to the indigenous donors and does not reflect the proportions in the general population.

Moreover, minority groups are often not being reached by the general recruitment methods used by blood establishments. We propose that a different, tailor-made approach is needed to recruit donors from minority groups, in order to be able to face up to current or future supply problems. Several countries are already facing difficulties in supplying matching blood products, tissues and stem cells to hospitals.

Both the observation that minority underrepresentation has already led to problems in the blood supply, and the expectation that this will happen more frequently in the future, have led to the initiation of the MIMI project. MIMI stands for 'Missing Minorities'. The project was initiated by the European Blood Alliance in 2012. Eleven European blood establishments from Austria, Belgium, Croatia, England & North Wales, Estonia, Finland, France, Germany, the Netherlands, Portugal, Sweden and a German university department are involved in the MIMI project.

Before further exploring the topic of minority recruitment, it is important to determine what population groups we refer to in this Action Plan.

1.2 What are minority groups?

The Oxford Dictionary defines a minority as "a small group of people within a community or country, differing from the main population in race, religion, language, or political persuasion"⁶. In this Action Plan, we do not concentrate on people who form a minority group within the general population because of their religion, language or beliefs. However, we do focus on people who have a different origin or culture, most often because they themselves or their parents or grandparents were born abroad.

The minority groups we focus on in this Action Plan have various backgrounds. Some of them - or their parents or grandparents - come from former colonies, neighbouring countries or countries that have strong political

connections with their country of current residence. Others are refugees, asylum seekers, labour migrants, come from overseas territories or belong to an ethnocultural subpopulation within the country (e.g. Roma).

From a blood supply perspective, we distinguish two separate minority groups in this Action Plan:

- Minority groups that differ from a country's indigenous population in terms of blood or tissue typing. Often, they do not differ in regular ABO blood typing, but they do in extended typing.
- Minority groups that do not differ from a country's indigenous population in terms of blood or tissue typing, but who form a large group of potential new donors.

Both groups can play an important role in the blood supply within a country.

1.3 Why are minorities underrepresented in the donor base?

In many countries, minorities are underrepresented in the donor base^{3-5, 7}. When people move to a new country or when their community is relatively new in a country, they often are not involved as blood donors. The literature on this topic mentions several potential underlying reasons, which are further described in chapter 5:

- People feel excluded from society or experience discrimination
- Lack of knowledge: people are not aware that their blood is needed
- People assume their religion does not allow them to donate blood
- Fear/myths regarding the blood donation process
- People do not trust medical institutions
- People prefer their blood donation to be used for their own community

1.4 Why could underrepresentation be a problem?

Blood establishments in various countries may face problems in the coming years because of underrepresented minority groups in the donor base. These problems can be twofold:

- Qualitative problems: problems in supplying products for rare or specific blood groups
- Quantitative problems: problems in the general blood supply because large groups in the general population are not active as blood donors

Qualitative problems

From a medical perspective, minority underrepresentation can cause problems in the supply of matching blood products⁸⁻⁹. Various minority groups differ from a country's indigenous population because of genetic differences in blood group antigen expression. As mentioned before, they often do not differ substantially in terms of regular ABO or Rhesus CDE blood typing, but they do in extended blood typing (e.g. MNS, Kell, Duffy, Kidd).

In most cases, blood establishments are able to supply the requested blood types to hospitals, but there are situations in which it is extremely hard to find a matching blood product for a patient. Especially for multiple-transfused patients, such as thalassaemia or sickle cell disease patients, an increasing number of specific blood products are required. In these patients, multiple transfusions have caused the formation of antibodies against several blood types, which increases the challenge of finding matching blood products. In order to prevent future problems in the supply of rare or specific blood types, special recruitment of donors with these blood types will be needed.

Extended red cell typing is important for the supply of blood products. However, it is equally important to find HLA-matching tissues (including organs) and stem cells for the patients in need of these. Here, it should be realised that in several countries, tissue and especially stem cell donors are being recruited directly from the blood donor base. For this reason, it is of utmost importance that minority groups with different extended red cell or HLA typing are represented in the donor base. Diversifying the donor base is needed to ensure that all

persons in need of products of human origin have a better chance of finding matching products. In an ideal situation, the donor base presents a true reflection of the total population.

Quantitative problems

The overall European population is ageing¹. In several countries, a large group of people who were born in the years after World War II (the so-called baby boom generation) will not be eligible for blood donation over the next few years, either because their health condition does not allow them to donate or because of age limits set up by the blood establishment. Furthermore, life expectancy throughout Europe continues to rise¹. This has the potential to impact upon blood product demand in the (near) future, as a substantial quantity of blood products is transfused to elderly patients¹⁰⁻¹⁴. It is important to have a sufficient number of donors to prepare for the expected loss of donors and the growing demand for blood products.

From a donor base perspective, some minority groups are large in number in the general population, but make up only a very small part of the donor population. For this reason, it might be beneficial to specifically aim recruitment activities at these groups. This new group of donors will help increase the total number of donors in the donor base to the desired level, to prevent quantitative blood supply problems.

1.5 What actions have been taken so far?

Minority donor recruitment is still in its infancy. However, throughout the world, several actions have already been taken during the last few years to recruit blood donors from minority groups. Blood establishments started specifically targeted campaigns: some with good results, others with mixed results. A few examples:

- In the USA, several recruitment campaigns have been set up to recruit African American and Hispanic donors
- In England & North Wales, the Inclusivity Marketing Group was created in 2003 to increase the recruitment and retention of blood donors from all minority groups
- In France, an anthropologic approach was used to recruit donors from the Comorian community in the city of Marseille
- In Canada, a position was created in the blood establishment to promote blood donation among the black community
- Some countries have cooperated with religious organisations, such as mosques and churches to reach potential minority donors

Also from a research point of view, minority recruitment is a relatively young topic. Some research has been carried out on the effect of targeted recruitment activities and on motivators and constraints for people from minority groups to become blood donors. Chapter 5 will discuss the research in more detail.

Still, a large area is to be explored. The MIMI project aims to contribute to this by setting up this Action Plan and conducting a survey.

1.6 The MIMI Survey

In 2012, the MIMI project surveyed current practices in recruiting donors from minority groups. A questionnaire was sent to blood establishments represented in the European Blood Alliance and to members of the ABO Donor Engagement and Relation Group. We sent out 54 questionnaires and received responses from 42 blood establishments (78%) in Europe, the USA, Canada and Australia. The results have been an important source of information for writing this Action Plan.

The questionnaire contained questions on four topics: demography, supply and demand, minority recruitment and retention experiences, and Research and Development. The main outcomes are described in chapter 5.

The survey results show that more and more organisations are planning to actively recruit donors from minority groups in the coming years. Currently, 40% percent of the responding organisations do recruit donors specifically from one or more minority groups. Another 20% indicate that they intend to do so in the future. The MIMI Action Plan aims to serve as a tool for implementing minority recruitment.

1.7 Objectives of this Action Plan

General recruitment methods are often not effective in reaching potential donors from minority groups. As minority underrepresentation is expected to be an increasingly pressing matter in the near future, guidance in setting up targeted recruitment programmes will be needed.

This Action Plan does not profess to be an inflexible doctrine. Instead, it provides a pragmatic overview of how you can develop a targeted minority donor recruitment plan, which complements both your country and your blood establishment. Along with examples, pitfalls and tips, the Action Plan provides a step-by-step approach to set up a recruitment plan for minority groups (Figure 1.1). It aims to provide a framework to establish the current context, set goals for the future and give guidance in setting up a strategy to reach these goals.

Chapters 2, 3 and 4 give guidance in setting up your action plan. Chapter 5 serves as a source of information on minority recruitment. It contains information on literature in the field of minority recruitment and describes the MIMI Survey results.

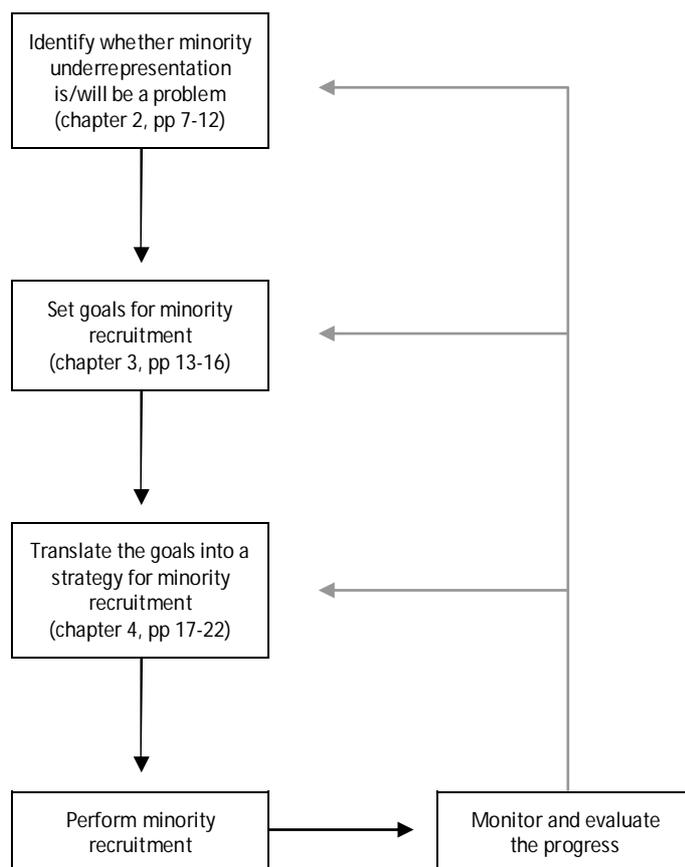


Figure 1.1 Action Plan for minority recruitment

2. Identifying the problem

“We are not doing enough to involve minorities” is often the first thought that comes to mind when thinking about minority involvement in the blood supply system, but this statement is unfit as a problem definition. As a blood establishment, the ultimate goal is to match demand and supply, so a more precise problem definition is required. Therefore, this chapter contains four steps to identify whether minority underrepresentation is a problem in your organisation.

2.1 Questions to be answered

The population of any country is constantly changing, for example in size and age distribution. Furthermore, the population of generally any country is multi-cultural and multi-ethnic to varying degrees. The size and age distribution of the minority groups will evolve as well in the coming years. It is generally noted that the participation of minority groups in blood donation is lower than in the general population.

It is of utmost importance to determine whether minority underrepresentation is or will become a problem in your blood establishment. Therefore, the question of representation of these multiple groups within the donor (and patient) population and its influence on the blood and blood product supply, as well as the supply of tissues and stem cells, needs to be addressed.

The following questions need to be answered:

- Does/will your organisation need the blood/tissues/stem cells of donors from minority groups to meet the overall demand?
- Does/will your organisation need the blood/tissues/stem cells of donors from minority groups to meet specific demands (rare blood types)?

Scenarios

One scenario, when a defined subpopulation has a very low participation rate, is a quantitative problem. If your demographic data show that this subpopulation is growing in relation to the general population, the low participation rates could lead to an undersupply problem. In this scenario we would clearly identify and name the subpopulation with the low donation rate and address the low participation rates: “The population of minority group X is expected to grow from 5% to 15% in the next Y years. Participation rate is only 1% compared to 5% in the general population. This would mean a drop in collected RBC units of Z.” If your country’s or region’s population is expected to grow in the next decades only because of migration effects and you observe very low participation rates in these groups, outlining and quantifying these groups could serve as a proper identification of a current or future problem.

On the other hand, you might run into undersupply issues on a qualitative level. This means that, while ABO unit supply and demand match on a weekly basis and comfortable ABO inventory levels exist, you could still run into severe undersupply problems with rare blood types. For example, consider blood types with a prevalence of 1% in certain populations (e.g. U negative in Sub-Saharan minority groups) and near zero occurrence in the general population. Demographic changes in these small subgroups could lead to severe undersupply issues. If, for example, the population group with the rare antigen reaches old age and the general population cannot supply these antigens, your problem could be: “Small populations (with a certain occurrence of antigen XY) will become elderly and therefore increase the demand of specific blood units in the next decade to about N per year.”

In order to identify the potential problem in your organisation, the following sections describe four steps:

- **Step 1:** determining the composition of both the current and expected future population through demographic analysis (section 2.2)
- **Step 2:** evaluating the size of the current and future donor and patient population with expected representation of minority groups within this population (section 2.3)
- **Step 3:** evaluating the influence of this diversified population on the supply and demand of blood and tissue products from both a quantitative (ABO groups) and a qualitative (specific/rare blood/tissue types) point of view (section 2.4)
- **Step 4:** formulating the problem precisely, based on the information you gathered in step 1-3 (section 2.5).

Depending on the outcome of the analysis in this chapter, further action may be needed. The information you will gather in this chapter will serve as a basis for further developing a plan for minority recruitment. Chapter 3 will set goals for minority recruitment and in chapter 4 these goals will be transformed into a strategy.

2.2 Step 1: analyse population demographics

Draw a “map” of the overall population and the different minority groups, both at present and 10 years from now. Gather information on the total population (A), the minority groups that have a blood genotype distribution that differs from the general population (B) and the minority groups that have a blood type distribution that does not differ substantially from the general population (C). Before starting, take into account the following aspects:

Definition of ethnicity/minority groups: which definition is used in your country? Take into account nationality, country of birth/origin, parents’ country of birth, “roots”, ethnicity, culture and/or language.

Data collection – current and future projections: data must be collected from reliable sources. Incomplete or insufficient data generally lead to “no data”. For general demographic data, national statistical agencies¹⁵ or Eurostat, the statistical office of the European Union, have reliable databases¹⁶.

Parameters: identify parameters that will influence your population distribution: age/ageing, sex, migration, fertility. Develop short, medium and long term projections/models based on fertility rates, population growth, immigration and/or life expectancy.

A) Total population

1. Look up the size of total population. This information is generally available from national statistical agencies¹.
2. List the population distribution per age range. From the MIMI survey, it appears that this information is also readily available.
3. Describe the changes expected in the coming 10 years. From the MIMI survey, changes expected in most countries are:
 - Ageing of the population with a shift of the size of age groups to higher age ranges
 - Decrease – absolute and/or relative – of the population eligible for blood donation

B) Population from minority groups with genotype ≠ general population

1. List the size of the top 5 groups that have blood genotypes that *differ* from the general population, and describe their proportion in the general population.

2. Specify the changes expected in the coming 10 years:
 - MIMI survey data suggest that the size of these groups is expected to increase in most countries essentially due to higher birth rates and increasing immigration
 - Comment: the size of the subgroups is generally available in most countries; however, the genotype distribution is at best an “educated guess”

C) Population from minority groups with genotype = general population

1. List the size of the top 5 groups that have blood genotypes that *do not differ* from the general population, and describe their proportion in the general population.
2. Describe the changes expected in the coming 10 years:
 - MIMI survey data show that the size of these groups is expected to increase in some countries due to increasing immigration, but to a smaller extent than in the group with a different genotype
 - Comment: same as above under B)
 - Of particular note is the impact of a growing number of individuals with a multi-ethnic background

2.3 Step 2: analyse the donor and patient population

Analyse current statistics and future perspectives on both general and minority donor and patient populations.

After collecting data on the demographics of the general population in your country, the next step is to evaluate the current and future donor and patient population and the representation of minority groups among them, with focus on the distribution of general and specific or rare blood groups/tissue types.

When analysing past and current statistics and future estimations on both general and minority donor and patient populations, make sure to take into account the same aspects used for analysing the general population in step 1. Estimate the future perspectives for example in 10 years, or on a short, middle and long term basis.

This systematic donor and patient population analysis will focus on the total donor base (A), the minority groups in your donor population (B) and the patient population (C). These items are described stepwise here.

A) Total donor base

1. Describe the size of donor population (blood/tissues/stem cells) and its proportion of the general population.
2. Specify the donor age (and sex) distribution in the donor population.
3. Specify the general AB0/Rh and tissue type distribution in the donor population.
4. Describe specific/rare pheno-genotypes in the donor population.
5. Specify the donation pattern of the total donor base.
6. Identify the expected changes (increase/decrease) in the total donor population on the basis of the estimates for the general population.

B) Minority groups in your donor population

1. List the minority groups in your donor population of the same top 5 minority groups, and their proportion of the total donor population.
2. Describe the AB0/Rh and specific or rare pheno/genotype distribution in the minority groups (own data or based on available general data regarding different ethnicities).
3. From this information, identify the minority groups (size and age) in your donor population with pheno/genotypes that *differ* from the general population.

4. Also, identify the minority groups (size and age) in your donor population with pheno/genotypes that *do not differ* from the general population.
5. Describe the current situation and future perspective: changes expected from population projections (e.g. ageing, fertility rates and migration), for both the minority groups with pheno/genotypes that *differ* from the general population and the groups that have pheno/genotype that *do not differ*. Will the number of donors increase, decrease or be stable?
6. Specify the donation pattern of the minority groups in the donor base, for both the minority groups with pheno/genotypes that *differ* from the general population and the groups that have pheno/genotypes that *do not differ*.

C) Patient population (demands)

1. Describe the number of blood/tissue/stem cell products produced and delivered/transfused.
2. Identify the ABO/Rh and tissue type distribution and specific or rare pheno/genotypes in the patient population (number of rare/specific products produced and transfused).
3. Estimate the proportion of minority representatives in the patient population.
4. Indicate the number/proportion of patients/patient groups with a specific or high need of blood/tissue/cell products (e.g. transfusion dependents patients/disease groups and minorities with specific/rare blood/tissue type).
5. Look at developments in diseases. Is a certain pathogen becoming endemic in your region? Is a population with a higher probability of certain diseases (sickle cell anaemia, thalassaemia) growing and therefore increasing demand?
6. Describe the current situation and future perspective: changes expected.

Data availability

General data on the current donor base are readily available. Furthermore, national data on expected demographic changes in the general population facilitate projections regarding the future donor base. However, data concerning minority groups in the donor population are often not available. The MIMI survey showed that only 26% of the responding blood establishments register data on country of birth and 36% register self-identified ethnicity.

Assess whether you have methods and resources to collect possible missing essential data on minority groups, as for example country of origin, mother tongue or self-identified ethnicity. If not, this issue should be suggested for review for your blood establishment's data collection.

Additional considerations

When considering recruitment of different minority groups as donors it is also important to identify specific pathologies in these minority groups influencing demand and donor eligibility. For example, haematologic conditions as sickle cell disease and the epidemiology of blood transmissible infections might be more prevalent in certain groups within the population. The prevalence and incidence of viral or other infectious markers (including malaria) in specific population groups and their impact on donor eligibility and product safety have to be assessed.

After collecting and analysing the data on donor and patient population, the next step is to compare the data side by side, to identify possible problems between demand and supply and develop projections of the current and future needs in specific blood, tissue and stem cell types. These actions are discussed in step 3.

2.4 Step 3: analyse supply and demand

Quantify the past, current and future supply and demand of ABO blood and specific or rare blood/tissues/stem cells, from equally quantitative and qualitative perspectives.

A) Quantitative perspective: analyse past, present and future *medical needs for ABO types*

Focus on answering these 3 key questions, on the basis of blood product consumption data and reports:

1. What were the demand trends for ABO types in the past 10 years?
2. What are the medical needs for ABO types today?
3. How do you foresee short, middle and long-term medical needs for ABO types, taking into account the following factors:
 - The expected changes in the general population, identified in section 2.2 (item A3)
 - The expected changes in the proportion of minority groups in the general population, identified in section 2.2 (items B2 and C2)

B) Quantitative perspective: analyse your organisation's past, present and future *capability to supply ABO types*

After analysing the demand, focus on the supply.

1. Has your blood establishment been able to meet the demand for ABO types in the past 10 years?
2. To what extent is your blood establishment currently able to meet the demand for ABO types?
3. Do you foresee any shortages in ABO blood product supply within the coming 10 years, taking into account the donor population analysis you just made in section 2.2 (items A6 and B5)?
4. How many products are or will be missing in your inventory per week/month/year to meet the demand for ABO types?
5. If you have an undersupply, is it continuous or are there any seasonal fluctuations?

C) Qualitative perspective: analyse past, present and future *medical needs for specific or rare blood/tissues/stem cells*

For specific or rare types, make the same analysis. First answer the following 3 questions, on the basis of blood product consumption data and reports:

1. What were the demand trends for specific or rare blood/tissues/stem cells in the past 10 years?
2. What are the medical needs for specific or rare blood/tissues/stem cells today?
3. How do you foresee short, middle and long-term medical needs for specific or rare blood/tissues/stem cells, taking into account expected changes in the patient population you have identified in section 2.3 (items C5 and C6)?

D) Qualitative perspective: analyse your organisation's past, present and future *capability to supply specific or rare blood/tissues/stem cells*

After analysing the demand, focus on the supply.

1. Has your blood establishment been able to meet the demand for specific or rare blood/tissues/stem cells in the past 10 years?
2. To what extent is your blood establishment currently able to meet the demand for specific or rare blood/tissues/stem cells?
3. Do you foresee any shortages in specific or rare blood/tissue/stem cell supply within the coming 10 years, taking into account the donor population analysis you made in section 2.3 (item B5)?

4. How many products are or will be missing in your inventory to meet the demand for specific or rare blood/tissues/stem cells?
5. If you have an undersupply, is it continuous or are there any seasonal fluctuations?

2.5 Step 4: formulate the problem

On the basis of your analyses in step 1, 2 and 3, you should now be able to determine whether or not minority underrepresentation in your donor population is a problem. Answer the following two questions:

- Do you expect an increased representation of minority groups in the donor population is needed to meet the *overall demand for blood products/tissues/stem cells* in the (near) future?

If the answer is yes, there is a quantitative problem.

- Do you expect an increased representation of minority groups in the donor population is needed to meet the *demand for specific or rare blood products/tissues/stem cells* in the (near) future?

If the answer is yes, there is a qualitative problem.

Precisely formulate the problem

As a final step, formulate the expected problem(s) as detailed as possible, for example by using the following formulation:

- **"The underrepresentation of(specify the minority group(s))..... in the donor population is expected to lead to an increased demand of approximately(number)..... of(products and ABO or specific types)..... per(period)..... in(time frame)"**

Example: the underrepresentation of the Indian minority group is expected to lead to a shortage of 50 B positive red blood cell units per month in the next 5 years.

If you have identified a problem, further action in minority recruitment is needed. Chapter 3 will help you define goals for minority recruitment. In chapter 4, these goals will be put into a strategy.

3. Setting goals

After considering the general population, the donor base and the patient population, you have formulated current or future problems in chapter 2. These findings now need to be translated into specific goals for minority recruitment. How many donors from which minority groups do you intend to recruit and within which time frame? What constraints need to be taken into account? What possible risks are there? This chapter contains three steps to answer these questions.

3.1 Step 1: formulate your goal

After recognizing a problem, defining specific goals is the next step towards a minority recruitment policy. The goal is not simply to “promote participation of minorities” but a set of well defined, specific goals with either quantitative or qualitative criteria. Goals are the answer to the questions “what do we want?” or “what needs to be done to overcome a problem?”. If you currently have an undersupply problem, the difference between demand and supply will be your goal; if you foresee undersupply problems in the future, preparing to meet the future demand will be your goal.

The most important aspect is to set goals with quantities and time frames, for example by using one of the following formulations:

- **“Increase the number of(specify the minority group)..... donors in the donor population by(number or percentage)..... within(time frame)....., by using a tailored recruitment strategy, in order to solve/prevent the(formulate the problem)”**

Example: “Increase the number of Turkish donors in the donor population by 2% by December 2015, by using a tailored marketing strategy, in order to prevent the expected shortage”.

- **“Increase the number of collected..... (product).....from..... (specify the minority group)..... donors by(number or percentage).....within..... (time frame)....., by using a tailored recruitment strategy, in order to prevent/solve.....formulate the problem.....”**

Example: “Increase the number of collected RBC units from South-American donors by 1,000 per year in the following 2 years, by using a tailored recruitment strategy, in order to solve the current shortage”.

Make sure the goal meets the SMART criteria:

- **Specific** To make goals specific, your project team should know exactly what is expected, why it is important, who is involved, where it is going to happen and which attributes are important.
- **Measurable** If a goal is measurable, it is possible to know whether your establishment is making progress toward successful completion. Measuring progress is supposed to help a team stay on track, reach its target dates, and experience the exhilaration of achievement that spurs it on to continued effort required to reach the ultimate goal.
- **Attainable** Goals should be neither out of reach nor below standard performance.
- **Relevant** Goals should matter. Relevant goals (when met) drive your project team and organisation forward.

- **Time-bound** Grounding goals within a time frame, giving them a target date. A commitment to a deadline helps your project team focus their efforts on completion of the goal on or before the due date.

Writing down SMART goals gives your blood establishment a chance to look them over time to time and change something if needed. An important aspect is to apprise employees about objectives; it is impossible to achieve the goals when staff does not accept them or even does not know what the goals are.

3.2 Step 2: define boundaries and constraining parameters

After precisely describing your goal, a proper inventory of constraining parameters of your organisation is needed before developing the strategy in chapter 4. Constraints can occur on various levels and will not always be within your influence. The following shows several parameters that might constrain your strategy and set its boundaries.

Resources

Resources are tools which help to achieve the goals. They tend to have one important characteristic – they are usually limited. Goals should be matched with resources, considering timeframes. Recruiting donors from minority groups may require additional resources (budget and staff). It means that your organisation should consider really carefully how much they are willing to invest into attaining previously developed goals.

Budget: Is there a budget available; if so, how big is it? Is it dependent upon performance? The resources and budget you considered could pose severe constraints on the possibilities you have. You can find yourself in a situation, where there is no funding for additional staff or you have to allocate resources in the given organisation. On the other hand, you can be in the lucky situation of having a budget for additional activities. New recruitment materials, the development of a new website, additional equipment, more staff and many other decisions will influence and depend on the budget.

Staff: Determine how many staff will be available for your project. Will staff be made available for the project in either part time or full time capacity? Do you have staff from minority groups which could be helpful to facilitate implementation of the strategy? Will overtime be paid for these staff? Do they possess the necessary skills to take this project forward? If additional blood drives will be part of your plan, this could require more staff and vehicles.

It is not only important to know your “front line/public facing” staff resources; if your lab already reached its capacity limit and your recruitment and collection teams are understaffed, the commitment to additional activities or processes that influence utilization will not be possible, unless capacity is increased or adapted. Increasing marketing activities to recruit minority groups can lead to the appointment of a person. Do you have somebody with capacity available? Are recruitment staff already understaffed and overworked for general recruitment?

Available testing

Incidence and prevalence of infectious diseases might be higher in the minority group(s) you will recruit. Additional testing may be necessary, (e.g. for Chagas’ disease, West Nile virus, malaria, leishmaniasis, dengue, sickle cell or thalassaemia), depending on the group you are targeting. There might be no validated test available in your country. Also consider the processing techniques. It might be more cost efficient to implement pathogen reduction, but still risk for red cells remains.

“Business as Usual”

The recruitment has to augment existing recruitment and blood collection sessions; it should not have a negative impact.

Immediate barriers

What are the immediate barriers to donation which may affect minorities donating blood? Examples are lack of information/knowledge of the necessity for blood donation, language issues, travel issues and some conditions prevalent within communities such as sickle cell/sickle cell trait. Which of them can be overcome by investments, e.g. translation services; are they possible (financially and from both a legal and medical best practice point of view)?

If these barriers cannot be removed, do they therefore pose a real limiting factor for your strategy?

Donor ethnicity tracking and legal constraints

Is donor ethnicity monitored? How in-depth are the ethnicity questions for donors? There can be legal constraints such as privacy laws preventing you from tracking the ethnicity of donors. If you cannot register your donors by ethnicity, you will not be able to easily access possible minority groups with a higher prevalence of rare blood types without geno-/serotyping them and your project progress could be very difficult to track. Laws or regulations may also require you to defer donors with a certain origin ("malaria countries"). Subpopulations often tend to travel a lot to their countries of origin, which could lead to higher deferral rates.

External barriers

What about your clients (e.g. hospitals or plasma institutes)? Do you have quality assurance agreements which will have an impact on deferrals or mobilization efforts?

When considering constraints, it is important to single out those constraints that probably will not change during the timeframe you want to define your policy for. If you are understaffed in the lab right now, but there is a high probability of recruiting additional staff during the next year to solve this, you do not have a constraint, but just an operational challenge. On the other hand, a law restricting you from doing certain things is a constraint, especially if you know there are no planned changes in the near future.

3.3 Step 3: perform a risk analysis

Any changes in donor mobilization policies, deferral regulations, testing and other areas influence the risks; increasing or decreasing the probabilities of certain outcomes and often creating new risk scenarios. Consider all the possible consequences and outcomes of your strategy. Ask "what... if..."-questions to study the risks your organisation will be taking. The first question, of course, is: "What if we do not change our donor recruitment policy?". Since you already outlined the problem in chapter 2, you can easily state what would happen and balance this risk.

If, on the other hand, you change your recruitment approach towards minorities, outline the scenarios and describe the possible risks. "If we mobilize more donors of minority group X (which has a high incidence in hepatitis) to fill a gap in our ABO inventory, we could increase the viral risk ratio."

What would happen, if you commit to minority mobilization with certain groups, but deferral rates are high? Is there a risk of negative publicity? Could you undergo risks because your processes are insufficient for the recruited groups (pathogen inactivation, malaria testing)? Do you foresee huge cost drivers? Are there alternatives (importing rare blood from other blood establishments)?

One technique you can use to assess risks is the SWOT analysis (Figure 3.1). SWOT is an acronym for strengths, weaknesses, opportunities and threats. With this technique, you look for internal factors (strengths and weaknesses) that influence risks, e.g. the level of language fluency in your staff, and classify them as strengths or weaknesses. Threats and opportunities, on the other hand, describe external factors: the environment you are in. Highly organised cultural associations, probably willing to engage socially, are opportunities. Closed and not really accessible minority groups, with reservations towards established organisations, could be considered a problematic environment. Competing blood or plasma services could also be named as threats.

	Helpful (for achieving your goal)	Harmful (for achieving your goal)
Internal (inside organisation)	Strengths • — • — • — S	Weaknesses • — • — • — W
External (outside organisation)	Opportunities • — • — • — O	Threats • — • — • — T

Figure 3.1 SWOT analysis

3.4 Special attention for epidemiology of blood transmissible infections

The epidemiology of blood transmissible infections in certain minority groups may differ from the indigenous population. Minority groups may have a higher prevalence and incidence of blood-borne pathogens such as HIV, hepatitis B, malaria and other infections, common in people who travel. The higher prevalence (= existing cases of infection) often stems from their country of birth in first and second generation immigrants. On top of that, incidence (=new cases of infections) is also higher.

Before deciding to implement strategies to recruit donors from specific minority groups, it is of importance to assess the accompanying risks, in order to minimize the risk of blood product contamination. A possible outcome may be that the prevalence is too high and that the related risk for the blood product safety is too high recruit donors from a specific group.

Another possibility is to change the screening test procedure for new donors from certain minority groups. In this case, they do not make a donation yet during their first visit to the blood clinic. Only test tubes are taken, in order to test the blood on infectious disease markers. Once the test results are negative, the donor is invited for a next visit, in order to give his first donation, provided the screening test results are negative of course. Incidence in these selected minority groups is likely to be close to that in the indigenous population.

In this chapter, you formulated a goal for minority recruitment, defined the boundaries and constraints and performed a risk analysis. The next chapter will focus on translating this information into a strategy, in order to perform minority recruitment on an operational level.

4. Defining a strategy

Generally, a strategy is a broad plan to reach a measurable goal that was defined beforehand. It will define the direction for your recruitment and collection efforts for the future: a long-term set of goals. While decisions on the operational level (“day-to-day business”) often deal with rapidly changing situations, e.g. a change in a mobile blood drive’s location, a surge in sick leaves, etc., a strategy is a long-term commitment. It should be approved by board and stakeholders and be valid for a long timeframe.

This chapter aims to give you guidance on how to write your strategy for minority recruitment, in six steps. Elaborating on a strategy and distributing it to all relevant groups within your organisation can be a good way to provide information about your minority recruitment project, enhancing its implementation throughout your organisation.

4.1 Step 1: identify the relevant internal stakeholder groups within your organisation

After you have set the boundaries for your strategy, you should define the stakeholder groups that are relevant for your minority recruitment strategy. The relevant groups or persons within your organisation can be very different, depending on how your organisation is set up and managed. Obviously, your *recruitment staff* will be affected by the project, but you should also bear in mind that *collection teams, marketing teams, testing facilities, the public relations team*, and many others could be relevant stakeholder groups. Therefore, they should be named and addressed in the first part of your strategy, so that they know that the strategy is relevant to them. This list of relevant stakeholders will probably change as the project moves through the phases of the project lifecycle. It is important, however, to ensure that relevant stakeholders in the later phases of the project have early input into requirements and decisions that affect them.

4.2 Step 2: identify the relevant external stakeholder groups and define your target group

The most important external stakeholder group is, of course, your targeted minority group. If you are following this Action Plan from the beginning, you should have a good idea of what your target group looks like from your analysis of the problem. However, it is important to now define the specific minority groups that your recruitment effort will target by completing the second step in your strategy, answering, for example, the following questions:

- What is the group’s mother tongue?
- Does the group speak your country’s official language(s)? Are they comfortable in speaking and reading?
- In what regions and cities does the majority of the group live?
- What is the group’s socio-economic status (income level, employment rate)?

There could be other external organisations relevant for your minority recruitment strategy and you should mention and describe them in your strategy. For example, you can establish:

- Organisations that are associated with your minority group, e.g. local charities
- Gathering places of your minority group and organisations managing them
- Faith groups important to your minority group
- Community leaders / key figures

Your target groups and all associated stakeholder groups have now been identified and described.

4.3 Step 3: engage with your target group

In the third step, you define the strategic approach to your target group. Here it is important to bear in mind that there are always different levels in a donor recruitment strategy. That means that on a higher level, you probably have a general recruitment strategy and your minority recruitment should fit that strategy. For example, does your organisation usually focus on the pure number of donation interactions, or is the creation of a long term relationship with the donor the primary objective? Are communications with donors more on a personal level, or more mass media based? These things should be decided for your organisation in general and should afterwards also be valid for your minority recruitment strategy. Suggestions on what you may specify for the recruitment of minorities and what questions should be answered within this step are given below.

- **Who are your target group “gatekeepers”?**
Gatekeepers are those who will “unlock the door” to the community. That might be non-religious or religious leaders or pillars of the community such as local doctors, teachers and professors or community workers. Generally speaking, gatekeepers are the people who already have the respect of the community. Use these people’s expertise and opinions within the community; they are an invaluable resource. Learn from gatekeepers and other resources available about the targeted minority community, about their culture and tradition, in a respectful manner.
- **What are the target group communication channels?**
Does your target group have their own websites, radio stations, newspapers or TV channels? Are there community centres which run regular events, or places of worship, which act as a hub for the local community?
- **Learn about your target group culture**
You do not need to be an expert in the community culture, but it may be helpful to get some background information on topics such as family structure, religion, traditions and beliefs. This will help you to see the potential cultural barriers to blood donation. By doing some research you can probably find the donation deterrents and donation triggers within the communities (the information in chapter 5 will help with this).
- **Pay attention to the local area of your target group**
A minority group is not different from any other group of people. There is a range of community facilities which serve the community. Restaurants, cafes, cash and carries, sports clubs, universities, health groups, working environment, community centres, charities and places of worship; all have contact with the community and all can be utilized to great effect.
- **Find myths of your target group and then “bust” them**
Word of mouth spreads quickly among communities. Therefore, work hard to breakdown the existing myths (if any) about blood donation in the minority community. For example, the Black African community often believes (wrongly) that their blood is not used, because they are of African descent. Tell the community this is untrue and that you need blood from them!

4.4 Step 4: inform and train your staff

Recruitment and retention of minority donors will eventually, as for regular donors, depend on how well your staff fulfils the tasks assigned to them. As in any other project, their success is based on how well they are trained and how informed they are about your organisation’s goals and strategies. Therefore, in the fourth step, you should describe how you plan to inform and train your staff. Some suggestions and questions to be specified in this step are given below.

- **Communication within your organisation is one key to success**
Your staff should know why you need blood from the minority donors. This is essential so that the staff realises that extra effort is for good reason. Organising special minority donor sessions may be

part of your plan. Often, these sessions provide lower yield than “standard” sessions and it is important that teams are not dispirited because of this. Therefore, you should describe in this step about how you plan to communicate with your staff. The perfect way to start this communication strategy is to give your project team a name, for example “MIMI Team”.

- **Appoint a project leader**
Appoint a person to be in charge of the project. According to the MIMI survey, the organisations that have a specific programme with an appointed leader/project manager have been more successful in recruitment of minorities than those with sporadic activities. Carefully consider the competences required for the project leader based on the project goals.
- **Spell out the pitfalls in minority recruitment**
Staffs need to be prepared. Equip your staff with basic knowledge of the community they are going into; a basic etiquette sheet is a good idea. It means that staff does not feel dislocated from the community they are entering into. Also, identify motives and obstacles that are typical for this minority group's behaviour. Fail to prepare and you are preparing to fail. You can either put this information in this part of your strategy or explain how you will train your staff in the future, for example, in a workshop.
- **Give engaged members of your staff a chance**
Maybe your first job in creating the team is to ask for volunteers. Often an engaged member of staff is a better choice than someone who is merely qualified for the job but not excited by it. Staff can be trained, but enthusiasm cannot be given to them. Therefore, in this part you should describe that anybody who is willing to contribute to the “MIMI Team” is welcome to do so. Also, describe the options on how to contribute to the “MIMI Team” and how to get extra knowledge and information on minority recruitment. For example, name actual workshops that are offered for all members of staff and communicate what type of training is provided to enhance their diversity knowledge and skills within your organisation, e.g. a cultural sensitivity training.
- **Do you have any staff available from your targeted minority group?**
It is not imperative that staff from minority backgrounds is assigned to either the project team or donation teams at community dedicated blood donation sessions (for one thing it is not feasible to represent every community). However, should you have staff from minority groups on your workforce, they may present an excellent resource for the project; having the advantage of community knowledge allied with knowledge of your blood establishment. As such it may be beneficial to appeal to staff from a minority background for their input and their expertise.

4.5 Step 5: choose concrete actions

The next step is to choose concrete actions for your strategy. Unfortunately, there is no such thing as the “the right way” to recruit donors from minority groups. Successful recruitment strategies depend on many factors, such as specific target group characteristics, the way blood collection is organised in your country and the available resources for the project. Table 4.1 below provides examples of initiatives undertaken by various blood establishments.

The examples of targeted recruitment reported in Table 4.1 below were split up in actions for minority recruitment and retention. The phase of action is displayed in the first column of Table 1 and the examples of actions are listed in the second column. The examples of actions are taken from the answers to the MIMI survey and verbal descriptions of actions reported within the MIMI project team.

Phase of action	Example of actions
Recruitment	Recruit via patients' community (for bone marrow donors). Patients from relevant minority groups will arrange for recruitment drives from their community.
	Introduce a theme week at your collection site(s), e.g. "Mexican Week".
	Create a "Minority Donor Recruiter" position.
	Hold lectures at cultural events.
	Allow additional weekend blood drives and reduce the minimum number of donors required to organise a blood drive.
	Ensure the presence of minorities in the recruitment material.
	Hold a staff training session.
	Adapt/translate your advertisement to fit your target group.
	Adapt/translate your written information material and your homepage.
	Organise information and recruitment sessions in minority community's religious places such as mosques.
	Start a partnership with a minority organisation.
	Approach existing minority donors to recruit their friends and family.
	Target 2 nd or 3 rd generation migrants. Often, their level of social integration is higher than in 1 st generations.
	Participate in fairs for immigrants.
	Hire special staff that speaks the language of your target group(s).
Target schools with information events about blood donation, health and nutrition.	
Retention	E-mail sent to existing donors.
	"Thank-you" note after each donation and invitation to other blood drives.
	Ethnicity-linked direct marketing and social media.
	Specific follow-up of donors with rare blood types and their siblings.
	Approach minority donors to find others.
	Repeat blood drives with organisations that are helpful in minority recruitment.

Table 4.1: Examples of Actions for Minority Involvement

Make it measurable

Make an overview of each action that will be taken by your "MIMI Team". For every item, specify the following:

- What is the action?
- Who will perform the action?
- When will the action take place?
- What is the available budget?
- How many working hours are available?

Not only does this overview of actions give insight into the tasks, responsibilities, time frame and budget; it also provides a framework to monitor and evaluate the project's progress. Section 4.6 will describe project monitoring and evaluation in a more detailed way.

While choosing concrete actions for your project make sure you build in steps that involve all participants - you need to take people with you, not just get the tasks done.

Include milestones

It is important to introduce achievable milestones for your project. Working with minority groups can be a challenging task, therefore, whilst the long term vision should be to make your donor base representative of your general country population, short term milestones are a fantastic way to motivate your team. Also, they are an important tool for project monitoring (see section 4.6). Below you can find some examples of possible concrete milestones for your "MIMI Team".

- The team for minority recruitment is set up
- The creation of the team is communicated throughout your blood establishment
- The target communities that you are going to engage with are defined

- The first community dedicated blood donation session is scheduled
- An upturn in the recruitment of minority donors of X% is measured
- Enquiries from minority communities about blood donation increase

Ask for formal approval

After drafting your strategy, have it approved by your board. Since a new policy can mean radical changes in your donor recruitment methods, blood collection activities, processes and can have an impact on staff and budget, approval by the board is fundamental. Make sure minority recruitment will be integrated into your blood establishment's overall strategy, in order to guarantee continuation.

4.6 Step 6: monitor and evaluate your project's progress

It is important to keep track of what you are doing, why you are doing it and how well it is working. That means that it is important to measure your progress. Savour your successes, but also analyse your failures and make adjustments to your process if needed. Keeping track of your project's progress and success is of utmost importance. The Plan-Do-Check-Act cycle (Figure 4.1) is one of the available tools to do so. This four-phase cycle can be used for the control and continuous improvement of organisational processes or implementation of new processes.

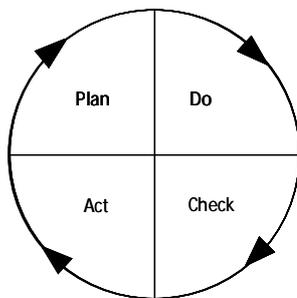


Figure 4.1. The Plan-Do-Check-Act cycle

Plan

The "Plan" phase has already been completed: in chapter 2 and chapter 3 you have defined the problem and set the goals (using the SMART criteria) for your minority recruitment project. In this chapter you have defined a strategy, in order to achieve the expected outcome, and formulated concrete actions for your "MIMI Team".

Do

In the "Do" phase, you put your plan into action and collect data for the "check" and "act" phases. Make sure you measure and collect relevant data on a monthly or quarterly basis, such as:

- The number of donors from minority groups who made their first donation
- The number of donors from minority groups who made their second donation
- The number of working hours used for the project
- The costs made

Check

Evaluate the project's results. Assess the measurements you collected in the "Do" phase, and compare the results against the goals you set beforehand in the "Plan" phase to ascertain any differences. Have actions been carried out as planned? Did they have the expected effect? Have the actions been carried out within the available budget and working hours? Are there any factors that turned out differently than you expected? Are there any unforeseen or unwanted consequences? Is the project planning still realistic?

Make sure to determine beforehand when evaluations will take place. Mark fixed evaluation moments, for example every six months. Name one person who will be in charge of these control mechanisms, e.g. the project leader.

Act

Corrective actions on significant differences between the actual and planned results may be needed. Determine where to apply changes in order to improve the minority recruitment process. Evaluating your project while in progress gives you the opportunity to go back to previous steps in the Plan-Do-Check-Act cycle. It may be necessary to go back to the “Do” phase to adjust actions you have planned. In some cases it is necessary to redefine the “Plan” phase, by revising the project’s strategy (chapter 4), goal (chapter 3) or even the problem formulation (chapter 2) and to go through the cycle again. Figure 4.2 illustrates the Plan-Do-Check-Act cycle within your Action Plan for minority recruitment.

Be realistic and patient

A substantial part of work within the minority communities is foundation work. As such, it is important to realise that the fruits of your labour may not be immediate. Sometimes, you might feel the loneliness of the long distance runner, but realise that you are doing something new and important. Probably, you will need to invest extra energy and work to motivate the whole team. You are changing a way of thinking for a community (and sometimes a blood establishment). You are also trying to change the way an entire community interacts with your blood donation service.

Chapters 2, 3 and 4 have helped you in setting up an action plan for minority recruitment. The following chapter provides more background information on minority recruitment. Not only does it focus on the knowledge that is already available, but also on research and policy questions that need to be answered in the future.

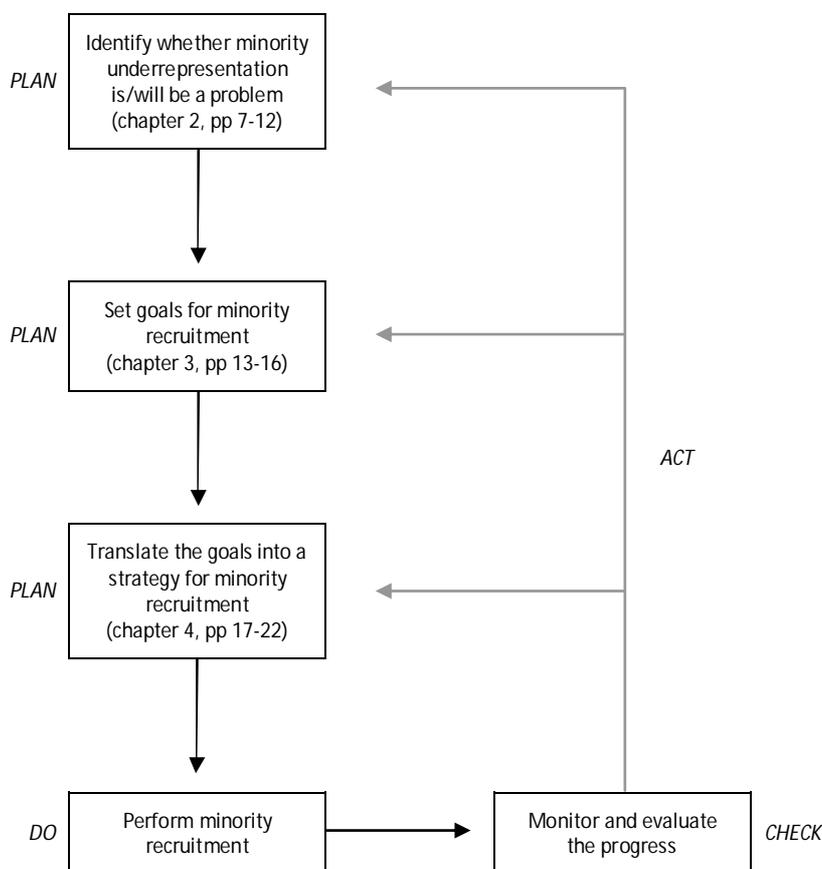


Figure 4.2 The Plan-Do-Check-Act cycle for minority recruitment

5. Knowledge and knowledge gaps

This chapter describes the available knowledge on minority recruitment. Minority recruitment is a relatively new field of work for most blood establishments. Although a large area is still unexplored, several sources of information are at our disposal.

First, we evaluate what knowledge is currently available. We do so by consulting various sources of information: not only literature, but also other sources, such as the MIMI survey on current practices in minority recruitment and other institutions that focus on minority groups.

Besides what we already do know, there is a substantial knowledge gap to be filled. Section 5.4 contains an overview of research topics and management information that are not available yet, but will contribute substantially to successful minority recruitment.

5.1 Literature

Although several papers have been written on minority recruitment, unfortunately, no integrative review is available yet. Providing a full literature overview on minority donor recruitment goes beyond the scope of this Action Plan. However, this paragraph attempts to provide a short summary of the literature. An extensive list of available literature can be obtained by contacting the MIMI working group.

Minority blood donor recruitment

Several studies have focused on theory and evidence based recruitment programmes for specific minority groups. Most notably, a French research team describes an anthropological approach to minority recruitment⁷. This approach can be implemented in different settings and could be useful to anyone seeking for a solid methodology to start studying and recruiting blood donors from a minority group. Most elaborate studies have used a qualitative approach, e.g. interviews with members of the community about health care, blood donation and cultural issues¹⁷⁻¹⁸. Interviews and questionnaire studies show that different cultures have different ideas concerning blood, blood donation and healthcare which have to be taken into account when designing recruitment and retention programmes.

Blood and symbolism

In Sub-Saharan African countries, blood is associated with a strong traditional symbolic meaning. Interviews with people from these cultures showed widespread reluctance to giving away part of the body. Many people believe that their general health status would be altered by donating blood, or that they might be contaminated with HIV¹⁹⁻²³. Other beliefs are that the “vital force” or “health capital” would be diminished, or that the blood would be used for “voodoo purposes”^{7, 23}. Some Asian cultures share similar ideas. According to traditional Chinese beliefs, blood is linked to the life force “Qi” or “Chi”. Blood donation is therefore believed to have a negative influence on the Chi^{22, 24}. In many cultures, blood is a symbol for the bond shared with family and ancestors (“blood relations”). In those countries, blood is often donated only to family members in cases of emergency.

Religion

Almost all of the great religions allow blood donation and blood transfusion²⁵. According to our information, the only religious group that prohibits blood donation under any circumstance is the Jehovah's Witnesses. However, for many people it is unclear whether their religion condones blood donation²⁶. Among Muslims for example, a lot of different views exist. Many Muslims do not know if their religion allows blood donation. According to Islamic scholars, blood donation is allowed and even encouraged under certain circumstances. The Qu'ran verse “if you save one life, it is as though you save the world” can be interpreted as meaning a recommendation of life-saving donation by Islam^{7, 27}.

In-group altruism

Donor recruitment strategies are designed in cultures that emphasize individualism. Many migrants come from more or less collectivistic societies²⁸. Therefore, migrants feel more motivated when the blood they have donated would be given to members of their own community²⁹⁻³¹. This preference has also been found in studies on organ donation³²⁻³⁴. This in-group altruism can even be found among Western people living in other Western countries, and is therefore not limited to non-Western migrants.

Social exclusion

Feeling included in your country of residence is a very important motivator to participate in activities benefitting society. Real and perceived discrimination experienced by African migrants in Australia, in their everyday social interactions or in institutional settings, acted as a barrier to blood donation¹⁷⁻¹⁸. In general, the respondents in this study were positively disposed toward blood donation. However, they felt that their blood would not be wanted, based on a perception of host country mistrust and discrimination. Studies in the USA have found that Asian, black and Latin-American donors named bad treatment by blood centre staff as the most important reason for quitting donations³⁵. These findings were confirmed by a later study³¹.

Medical mistrust

Medical mistrust can be a barrier for many groups to decide to start donating blood. Notably, some African Americans do not trust health care and the blood donation system³⁶⁻³⁸, and this influences their decision to donate blood³⁹. Concerns about mistrust of hospitals and discrimination in hospitals explained most differences in willingness to donate blood between black and white individuals⁴⁰.

Similarities

In spite of the differences, many barriers and motivators are actually quite similar among different (ethnic) groups, especially when the minority group has been living in the host country for a while. Fear of needles, convenience of the location site and lack of awareness of the need for blood can be barriers that influence the decision to donate in all non-donors⁴¹⁻⁴³.

5.2 The MIMI Survey

In 2012, the MIMI project group performed a survey on current practices in recruiting donors from minority groups. We sent a total of 54 questionnaires to blood establishments in 34 countries in Europe, the USA, Canada and Australia. A total of 42 respondents (78%) from 23 countries (68%) returned a completed questionnaire. The survey results show the current state of affairs in demography, supply and demand and minority recruitment and retention.

Demography

In many countries, the population composition is subject to change. Ageing and an increasing number of minority groups are the main factors causing these changes.

Ageing population: The total population in 75% of the responding countries will increase over the next decade, varying from +1.8% (France) to +13.9% (Australia). The populations in the other countries are expected to decrease by -0.1 (Denmark) to -1.9% (Romania). In again 75% of the countries, ageing of the population is a current or future factor that is expected to influence the composition of the donor base. Consequently, the proportion of people eligible for donation will decrease (either because of health reasons or because of age limits set by the blood establishments) and the demand for blood products needed for elderly people may increase.

Minority population: The percentage of people with a blood genotype that *differs* from the general population varies by country. These persons may play an important role within the blood supply, especially for the supply of products with specific blood types. The interpretation of the following reported percentages should be done with care, as the data sources used are not comparable between all countries (some have included 2nd and 3rd generation of migrants, others have only reported persons who were born abroad or made educated guesses). In some countries, such as the USA (37%), France (25% of the population aged 18-60), Spain Madrid area (16%),

England & North Wales (14%) and the Netherlands (12%), the proportion of people with a blood genotype that differs from the general population is reported to be over 10%. Other countries indicate a proportion of 8% (Canada, province of Québec) or between 1% and 5% (Belgium, Denmark, Finland, Germany, Italy, Luxembourg, Portugal, Spain Basque Country and Sweden). Austria, Estonia and Malta report that the people with a different blood genotype make up less than 1% of the total population. Seven countries did not provide numbers. Of the reporting countries, 55% expect the numbers to increase over the next 10 years, 15% expect a decrease and 30% foresee a stable situation.

Minorities whose blood genotype *does not differ* from the general population may form a significant group of potential donors. The following survey results on this group should be interpreted with the same reservation as mentioned above. In a small number of countries, these groups constitute more than 15% of the total population (Luxembourg 32%; Estonia 30%; France 19% of the population aged 18-60, Austria 17%). Most countries (Belgium 10%; Denmark 6%; England & North Wales 6%; Germany 9%; the Netherlands 9%; Spain Basque Country 6%; Spain Madrid area 7%) report a proportion between 5% and 10%. In Finland, Italy, Malta, Portugal and Slovenia the groups make up less than 5% of the population. Nine countries did not provide data. Half of the reporting countries expect the number of minorities whose blood type does not differ from the general population to be stable over the next decade. An increase is expected by 39% and 11% predicts a decrease.

Donor base: The majority of respondents were not able to provide data on the representation of minority groups in their donor base, either for people whose blood genotyping does differ and for people whose blood genotyping does not differ from the general population. Many blood establishments do not register country of birth or ethnicity in their databases, either because they are not allowed legally or because the data have not been of interest so far.

In the responding organisations, as a rule, a very small proportion of people whose blood genotyping differs from the general population are represented in the donor base. Also the minority groups that do not differ from the general population in terms of blood genotype are underrepresented in the donor base.

Supply and demand

An ageing population and underrepresentation of minority groups may lead to current or future supply problems.

Regular blood types: 54% percent of the responding blood establishments mention shortages in supplying regular blood types, in particular type 0 negative. The frequency of these shortages varied from occasionally to weekly or daily. About half of the respondents expect these shortages to occur over the next 10 years, either to the same extent as today or even higher shortages.

Specific/rare blood types: Shortages in supplying specific or rare blood types to hospitals are faced by 60% of the respondents. Most of these respondents (78%) report that this happens on an occasional basis. In 18%, problems occur monthly. One respondent (4%) experiences problems on a weekly basis. Fifty-three percent of the respondents foresee further shortages over the next decade, either at the same level as today or (even) more frequent shortages. Currently, the majority of the responding blood establishments perform extended blood typing in their donors, either in all (61%) or in a sample of donors (8%). Thirty-one percent does not perform extended blood typing.

Tissues: Most respondents (64%) were not able to provide data on the supply of tissues to hospitals. Twenty-six percent does not experience any shortages, while 10% does, on an occasional basis. Future shortages are expected to be at the same level as today. HLA typing is currently performed by 51% of the blood establishments, in certain groups of donors.

Stem cells: Also for stem cell supply, 52% of the respondents could not provide any data. Problems in supplying stem cells to hospitals are experienced by 12% (occasionally or monthly), while 36 % does not have supply problems. Over the next 10 year, 3% of the respondents foresee shortages in the supply of stem cells, either to the same extent as today or to an increasing extent.

Minority recruitment and retention

Currently, 40% of the respondents recruit donors from one or more minority groups, while 60% do not. Of the organisations that do, 12% recruit donors from all minority groups and 29% focus on specific groups. Twenty-one blood establishments (57%; this includes the organisations that already do recruit minority donors) *intend* to recruit donors specifically from one or more minority groups.

Success rate: Recruitment efforts so far have had varying levels of success. In some blood establishments, the effect has been little or modest. Other organisations just started their minority recruitment and therefore are not able to provide data on the success rate. However, several organisations are successful in minority recruitment and have increased the proportion of minority donors in their donor base.

Recruitment methods: Blood establishments use various methods for minority recruitment. The survey results do not allow drawing conclusions on which methods are successful for what particular groups. The following methods are used by the responding organisations:

- Special positions or working group have been created to enhance minority recruitment
- Community dedicated blood drives
- Recruitment in churches, mosques or other religious venues
- Recruitment in community centres
- Recruitment during special events, such as religious festivals
- Recruitment materials in different languages
- Recruitment by approaching (religious) community leaders
- Recruitment in schools and universities
- Changes to the normal blood drive configuration (e.g. hours of operation changed, reduction in the minimum number of donors required to organise a blood drive, donation procedure in different language)
- Staff training on diversity
- Culturally tailored approach
- Making minorities more present in the general recruitment materials
- Advertisements and commercials in newspapers and radio stations used by minority groups
- Cooperation with embassies
- Cooperation with minority countries of origin

Obstacles: Reporting organisations identify several obstacles in minority recruitment, such as language barriers, a high deferral percentage, socio-economic issues, socio-cultural issues, myths about blood donation and a lack of trust between minorities and the blood establishment. Also, some organisational barriers prevent minorities from donating. For instance, in some blood establishments people from certain areas (e.g. from Sub-Saharan countries) or carriers of sickle cell anaemia or thalassaemia are not allowed to donate. Other organisations allow only citizens to donate. In 40% of the reporting organisations it is not possible to go through the donation process in a foreign language besides the country's official language(s).

Facilitators: On the other hand, there are certain facilitators in minority recruitment. Respondents indicate factors such as the presence of minority staff in the blood establishment, bi-lingual staff, motivated staff, the possibility to go through the donation procedure in another language, the use of a recognised community spokesperson and initiatives by minority communities themselves as the main facilitating factors.

Retention: Only a few respondents monitor minority retention and were able to provide data. Some respondents report higher retention rates for minority donors compared to general donors; in other organisations the retention rate continues to lag behind that of non-minorities. In general, blood establishment organisations from the USA report to be slightly more successful in retaining minority donors than their European colleagues.

5.3 Other sources of information

There are several sources of information that can be used to gain further insight into minority involvement and the specific background of your target group.

Most scientific information on minorities and minority information is available online. Section 5.1 has given a general overview on available literature. If you are looking for more specific information, sites such Google, or search engines for scientific publications like as PubMed or Google Scholar can provide a host of information on several topics related to minority recruitment. Do not limit your search to terms such as “recruitment” and “blood donation”, but also look for other topics, such as organ or bone marrow donation.

Other people or institutions may be an even better resource. When looking for specific information on the background of your target group, contacts from other blood collection establishments or knowledge centres for minorities can lead you to information to start your studies. Also find out if there are other organisations in your country that have experience in mobilising minority groups and what information they have used as a basis for their strategy. Local university departments such as social health, social medicine, psychology, marketing, anthropology or interdisciplinary groups, might have performed research on your target group. Cooperation with these departments might therefore be beneficial.

National¹⁵ or European¹⁶ statistical agencies usually have information on demographics, such as age, gender, ethnicity, social status, fertility, family structure, migration, employment and social participation. Furthermore, they can provide data on demographic trends and estimates on future changes.

5.4 What knowledge and information is not available yet?

The knowledge described in the previous sections can be of help when developing a minority recruitment plan for your organisation. As with many disciplines, there is still a lack of information. In daily practice, many organisational decisions regarding minority recruitment are based on a “gut feeling”, in the absence of extended research and management information. In order to facilitate campaign planning and cost estimation and improve recruitment results, many topics need further investigation. This is especially the case in Europe, where less research has been done on minority recruitment compared to the United States.

The MIMI survey results show that several responding blood establishments indicate that they intend to start research projects on minority recruitment and retention in the near future. These intended projects include the following ideas:

- Extensive research on donor database
- Research on differential recruitment strategies
- Study of demographic populations
- Research on how to target specific groups related to blood type
- Investigating trust issues among minorities
- Statistical comparison of cultural background of donors and recipients
- Donor motivation in different communities
- How to gain trust in different cultural communities
- Utility of community supported intervention

Besides these topics, knowledge gaps in both fundamental and applied research need to be bridged. The following paragraphs contain possible research topics and suggestions for management information that are helpful in starting recruitment plans.

Monitoring medical need and ethnicity: From a demand perspective, it is important to map which minority patient groups have specific blood product needs and what number of products is required. A clear overview of the specific demand for blood, tissue and stem cell products per minority group enables you to compare these data with donor base data. This requires a registration of origin/ethnicity in the donor base. Many blood

establishments currently do not register these data in their database yet; however, this information is very helpful for determining which minority groups need to be recruited.

Donation triggers and barriers: Extended research on donation triggers amongst minorities is needed. What intrinsic and extrinsic factors motivate individuals from minority groups to become blood donors? Do these factors differ across minority groups? Furthermore, it is important to identify what potential barriers prevent them from donating blood. Why do they register as blood donors less often than individuals from the indigenous population? Research on this topic has been done in some countries. However, the determinants and barriers of blood donation may differ considerably between countries and minority groups. Additional research is therefore necessary. Qualitative research including interviews is often an appropriate method for studying motivators and barriers. It enables you to obtain an in-dept analysis of your target group with minimal resources.

Communication channels & tailoring: Research on communication channels is important: which channels work for which groups? We know general ways to recruit donors, but do they also work for minority groups? More research on tailoring of recruitment efforts, including aspects such as effectiveness and cost efficiency, is required.

Country of origin: More insight into the blood donation process in the country of origin can be achieved by contacting blood establishments in other countries. Find out what methods they use to recruit new donors, to invite donors for donation and to retain donors. Furthermore, it is important to know how the blood supply system is organised. Is there a system of voluntary, unpaid blood donation or do they use family/replacement donation and/or paid donation?

(How to deal with) Deferrals: Deferral rates are higher among some minority groups than among donors from the indigenous population. More epidemiological research about deferral rates and reasons among minority groups is needed. If a certain minority groups has higher deferral rates, e.g. because of visiting their home country in a malaria risk zone, use this information in your communication towards donors when you start to recruit them. Try to avoid disappointment because of deferral.

Specific health issues in minority patients: Some minority groups have specific health issues, such as thalassaemia or sickle cell anaemia. It is important to find out which health issues play a role within the minority group you are targeting, in order to turn this into a motivator for group members to become a blood donor. Health issues within a community may form a specific and 'close' reason to become a blood donor: a way of helping your own group. Make sure you increase awareness by means of education and recruitment campaigns. Further research on this approach is needed.

Multi-ethnic background & shortages: Further research on the influence individuals with a multi-ethnic background on the blood supply is needed. In some cases, their blood and tissue typing is very different from the indigenous population, and therefore may present a challenge in finding matching blood products.

Retention: Little research is available on retention behaviour of donors from minority groups. What makes donors stay or leave? What kind of incentives are preferred by minority donors? What retention actions are needed to make sure a new donor will not stop donating after one donation, but become a regular donor?

Registration of extended typing at EU level: Considering the increasing mobility of both patients and blood donors, the absence of a central European registry of extended blood typing is perceived to be a cause for concern. At the moment, several blood establishments do not have a comprehensive database of extended blood typing. Moreover, there is no central European database in which these data from individual blood establishments are shared. Cooperation between blood establishments and policy makers, both at national and European level, is required to enable a central registry.

5.5 Concluding remarks

This Action Plan may have triggered your enthusiasm to change the idea of “we should do more with minority involvement” into a concrete recruitment plan. The steps described in chapter 2, 3 and 4 will help you analyse the current situation, set goals for targeted recruitment and develop a strategy to achieve these goals. The information described in chapter 5 can be used to gain insight into the available information and underlying aspects of minority recruitment.

Minority involvement will not be realised overnight: it is a process that requires a great deal of time, effort and persistence. Both your goals and strategy might have to be adapted or altered throughout the process. The ultimate goal is to create a donor population in which large minority groups are involved to meet the demand for general blood products and specific minority groups are available to meet the demand for specific blood, tissue and stem cell products. The authors of this Action Plan hope that the provided guidance helps you in taking up the challenge of working towards a diverse and representative donor population.

References

- 1 Demography Report 2010. Older, more numerous and diverse Europeans. European Commission, Directorate-General for Employment, Social Affairs and Inclusion. Eurostat, Luxembourg: Eurostat; 2011.
- 2 Lanzieri G. Fewer, older and multicultural? A projection of the populations of the European Union Member States by foreign/national background. Paper for the European Population Conference: Vienna 1-4 September 2010.
- 3 Atsma F, Veldhuizen I, De Vegt F, Doggen C, De Kort W. Cardiovascular and demographic characteristics in whole blood and plasma donors: results from the Donor Insight study. *Transfusion* 2011;51:412-420.
- 4 Gillum F, Eder A, Laurin-Jones T. Hispanic ethnicity, race and blood donation in the United States. *Transfusion Medicine* 2008;18:366-370.
- 5 Wu Y, Glynn S, Schreiber G, Wright D, Lo A et al. First-time blood donors: demographic trends. *Transfusion* 2001;41:360-364.
- 6 "Minority". Oxford Dictionaries. Oxford University Press April 2010.
<http://oxforddictionaries.com/definition/english/minority> (accessed February 26, 2013).
- 7 Grassineau D, Papa K, Ducourneau A, Duboz P, Boëtsch G, Chiaroni J. Improving minority blood donation anthropologic approach in a migrant community. *Transfusion* 2007;47: 402-409.
- 8 Issitt P. Race-related red cell alloantibody problems. *British Journal of Biomedical Science* 1994;51:158-167.
- 9 Noizat-Pirenne F. Immuno-hematologic characteristics in the Afro-Caribbean population: consequences for transfusion safety. *Transfusion Clinique et Biologique* 2003;10:185-191.
- 10 Greinacher A, Fendrich K, Brzenska R, Kiefel V, Hoffmann W. Implications of demographics on future blood supply: a population-based cross-sectional study. *Transfusion* 2011;51:702-709.
- 11 Borkent-Raven B, Janssen M, Poel van der C. Demographic changes and predicting blood supply and demand in the Netherlands. *Transfusion* 2010;50:2455-2460.
- 12 Currie C, Patel T, McEwan P, Dixon S. Evaluation of the future supply and demand for blood products in the United Kingdom National Health Service. *Transfusion Medicine* 2004;14:19-24.
- 13 Seifried E, Klueter H, Weidmann C, Staudenmaier T, Schrezenmeier H, Henschler R, Greinacher A, Mueller M. How much blood is needed? *Vox Sanguinis* 2011;100:10-21.
- 14 Cobain T, Vamvakas E, Wells A, Titlestad K. A survey of the demographics of blood use. *Transfusion Medicine* 2007;17:1-15.
- 15 A list of national statistical agencies' websites is available on
http://en.wikipedia.org/wiki/List_of_national_and_international_statistical_services
- 16 Eurostat: <http://epp.eurostat.ec.europa.eu>
- 17 Polonsky M, Brijnath B, Renzaho A. 'They don't want our blood': Social inclusion and blood donation among African migrants in Australia. *Social Science and Medicine* 2011;73(2):336-342.
- 18 Polonsky M, Renzaho A, Brijnath B. "Barriers to blood donation in African communities in Australia: Some surprising findings. *Transfusion* 2011;51(8): 1809-1819.
- 19 Thompson W. Blood donation behavior of Hispanics in the lower Rio Grande Valley. *Transfusion* 1993;33:333-335.
- 20 Oswald R, Gordon J. Blood donor motivation: a survey of minority college students. *Psychol.Rep.* 1993;72:785-786.
- 21 Grossman B, Watkins A, Fleming F, DeBaun M. Barriers and motivators to blood and cord blood donations in young African-American women. *Am.J.Hematol.* 2005;78:198-202.
- 22 Zaller N, Nelson K, Ness, P, Wen G, Bai X, Shan H. Knowledge, attitude and practice survey regarding blood donation in a Northwestern Chinese city. *Transfus.Med.* 2005;15:277-286.
- 23 Olaiya M, Alakija W, Ajala A, Olatunji R. Knowledge, attitudes, beliefs and motivations towards blood donations among blood donors in Lagos, Nigeria. *Transfus.Med.* 2004;14:13-17.
- 24 Tison G, Liu C, Ren F, Nelson K, Shan H. Influences of general and traditional Chinese beliefs on the decision to donate blood among employer-organized and volunteer donors in Beijing, China. *Transfusion* 2007;47:1871-1879.
- 25 Gillman J. Religious perspectives on organ donation. *Crit Care Nurs.Q.* 1999;22:19-29.

- 26 Gallagher C. Religious outreach for organ and tissue donation. *Journal of Transplant Coordination* 1998;8:60-62.
- 27 Sheikh A, Gatrad A. Promoting blood donation among British Muslims. *BMJ* 2003;326:1152.1.
- 28 Hofstede G, Hofstede G-J. *Culture's Consequences. Comparing values, behaviours, Institutions and organizations across nations.* Thousand Oaks, Sage Publications; 2001.
- 29 Amponsah-Afuwape S, Myers L, Newman S. Cognitive predictors of ethnic minorities' blood donation intention. *Psychology, Health & Medicine* 2002;7:357-361.
- 30 Mathew S, King M, Glynn S, Dietz S, Caswell S, Schreiber G. Opinions about donating blood among those who never gave and those who stopped: a focus group assessment. *Transfusion* 2007;47:729-735.
- 31 Shaz B, Demmons D, Hillyer K, Jones R, Hillyer C. Racial differences in motivators and barriers to blood donation among blood donors. *Arch.Pathol.Lab Med.* 2009;133:1444-1447.
- 32 Hall L, Callender C, Yeager C, Barber J Jr., Dunston G, Pinn-Wiggins V. Organ donation in blacks: the next frontier. *Transplant.Proc.* 1991;23:2500-2504.
- 33 Callender C, Bayton J, Yeager C, Clark J. Attitudes among blacks toward donating kidneys for transplantation: a pilot project. *J.Natl.Med.Assoc.* 1982;74:807-809.
- 34 Reitz N, Callender C. Organ donation in the African-American population: a fresh perspective with a simple solution. *J.Natl.Med.Assoc.* 1993;85:353-358.
- 35 Schreiber G, Schlumpf K, Glynn S, Wright D, Tu Y, King M et al. Convenience, the bane of our existence, and other barriers to donating. *Transfusion* 2006;46:545-553.
- 36 Siminoff L, Arnold R. Increasing organ donation in the African-American community: altruism in the face of an untrustworthy system. *Ann.Intern.Med.* 1999;130:607-609.
- 37 Siminoff L, Burant C, Ibrahim S. Racial disparities in preferences and perceptions regarding organ donation. *J.Gen.Intern.Med.* 2006;21:995-1000.
- 38 LaVeist T, Nickerson K, Bowie J. Attitudes about racism, medical mistrust, and satisfaction with care among African American and white cardiac patients. *Med.Care Res Rev.* 2000;57 Suppl 1:146-161.
- 39 Andaleeb S, Basu A. Explaining blood donation: the trust factor. *J.Health Care Mark.* 1995;15: 42-48.
- 40 Boulware L, Ratner L, Cooper L, Sosa J, LaVeist T, Powe N. Understanding disparities in donor behavior: race and gender differences in willingness to donate blood and cadaveric organs. *Med Care* 2002; 40:85-95.
- 41 Gillespie T, Hillyer C. Blood donors and factors impacting the blood donation decision. *Transfus.Med.Rev.* 2002;16:115-130.
- 42 Oswald R. A review of blood donor motivation and recruitment. *Transfusion* 1977;17:123-135.
- 43 Hupfer M, Taylor D, Letwin J. Understanding Canadian student motivations and beliefs about giving blood. *Transfusion* 2005;45:149-161.

Authors

Marja-Kaisa Auvinen	Karolinska University Hospital, Department of Clinical Immunology and Transfusion Medicine, Sweden
Silke Boenigk	University of Hamburg: Business Management of Public, Private and Nonprofit Organisations, Germany
Yves Charpak	Établissement Français du Sang, France
Theo Clarke	NHS Blood and Transplant, England & North Wales
Anne van Dongen	Sanquin Blood Supply, the Netherlands
Susanne Ekblom-Kullberg	Finnish Red Cross Blood Service, Finland
Lars Eberhart	Austrian Red Cross, Austria
Daniel Grubešić	Croatian Institute for Transfusion Medicine, Croatia
Regina Kaasik	North Estonian Regional Hospital, Estonia
Wim de Kort	Sanquin Blood Supply, the Netherlands
Bettina Lizardo	German Red Cross, Germany
Christine Maes	Belgian Red Cross, Belgium
Marius Mews	University of Hamburg: Business Management of Public, Private and Nonprofit Organisations, Germany
Luis Negrão	Instituto Português do Sangue e da Transplantação, Portugal
Corine Nicoué	Établissement Français du Sang, France
Glenn Nuboer	Sanquin Blood Supply, the Netherlands
Karin Pungas	North Estonian Regional Hospital, Estonia
Karen van den Toren	Sanquin Blood Supply, the Netherlands
Kim de Vogel	Sanquin Blood Supply, the Netherlands
Elze Wagenmans	Sanquin Blood Supply, the Netherlands

Editor

Elze Wagenmans	Sanquin Blood Supply
----------------	----------------------

Contributing organisations

Australian Red Cross Blood Service, Australia	Instituto Português do Sangue e da Transplantação, Portugal
Austrian Red Cross, Austria	Italian National Blood Centre, Italy
Basque Country Blood Transfusion Center, Spain	Karolinska University Hospital, Sweden
Blood Assurance, USA	Latvian State Blood Donor Centre, Latvia
Blood Bank of Alaska, USA	LifeServe Blood Center, USA
Blood Bank of Delmarva, USA	LifeShare Community Blood Services, USA
Blood Systems, USA	Memorial Blood Centers, USA
Blood Transfusion Center of Slovenia, Slovenia	Mid-South Regional Blood Center, USA
Blood Transfusion Center Oradea, Romania	Miller-Keystone Blood Center, USA
Centro de Transfusion de la Comunidad de Madrid, Spain	Mississippi Valley Regional Blood Center, USA
Coastal Bend Blood Center, USA	National Blood Centre of Lithuania, Lithuania
Coffee Memorial Blood Center, USA	National Blood Transfusion Service, Malta
Community Blood Bank, USA	NHS Blood & Transplant, England & North Wales
Community Blood Center, USA	North Estonian Regional Hospital, Estonia
Croatian Institute of Transfusion Medicine, Croatia	Northern California Community Blood Bank, USA
Croix-Rouge Luxembourgeoise, Luxembourg	Oklahoma Blood Institute, USA
Delta Blood Bank, USA	Organisation of Transfusion Centres in Denmark, Denmark
Établissement Français du Sang, France	Romanian Committee for Hematology & Transfusion, Romania
Finnish Red Cross Blood Service, Finland	San Diego Blood Bank, USA
German Red Cross Blood Service, Germany	Sanquin Blood Supply, the Netherlands
Gulf Coast Regional Blood Center, USA	Service du Sang, Belgian Red Cross, Belgium
Héma-Québec, Canada	University of Hamburg, Germany



Corresponding address

MIMI Project
c/o Sanquin Blood Supply
P.O. Box 1013
6501 BA Nijmegen
The Netherlands
e.wagenmans@sanquin.nl
+31 24 327 9043