

Rethinking blood use in Europe to improve outcomes for patients

A collaborative, patient-centred approach is needed to rethink and optimise blood management in chronic diseases in Europe.

Why is blood transfusion important?

Blood transfusions (especially of red blood cells) are currently a **cornerstone of treatment** for patients with anaemia caused by various chronic diseases.

Some patients need regular, life-long transfusions.

Blood transfusions are one of the most common procedures in hospitals

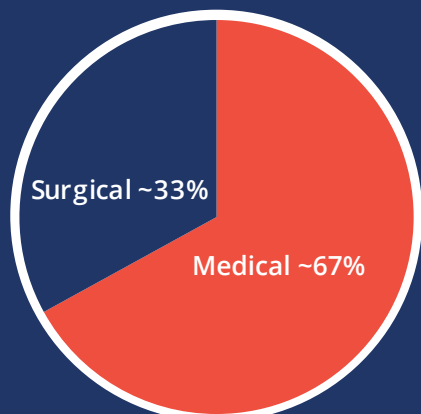
Across the European Union:

1400
blood establishments

20 million
blood donations every year

25 million
transfusions to patients

Around $\frac{2}{3}$ of red blood cell transfusions are used in medical care of anaemia related to chronic diseases



Why a rethink?

Blood transfusions (especially of red blood cells) present many challenges from the perspective of patients, families, hospitals and healthcare systems, and societies

Negative impact on patients and carers

• Impaired quality of life and inconvenience

- Patients may need transfusions every 1-5 weeks and each can take a full day

• Risks

- Potential complications, such as iron overload, immune-mediated reactions and infections, can be life-threatening

Threats to the sustainability of blood supplies

Although the supply of blood generally meets demand in the EU, there are threats from:

Increasing pressure (societal ageing, migration)

Seasonal shortages

Lack of EU level provisions to ensure continuity of supply

= Low stocks threatening supply at times

Costs

Transfusion dependence substantially increases chronic disease care costs

Complex blood supply chain

Healthcare costs

Costs incurred by donors and recipients

Indirect costs (e.g. productivity loss)

Estimated healthcare cost

€20,072

per patient per year, assuming patients received 2 units every 2 weeks.

Excludes indirect costs (e.g. productivity loss)

€154.4

million per year for a country of 10 million people

Variations in transfusion practices

Multiplicity of transfusion guidelines

Non-adherence to guidelines or difficulties to implement

Variations in oversight systems

Need for alternative treatments

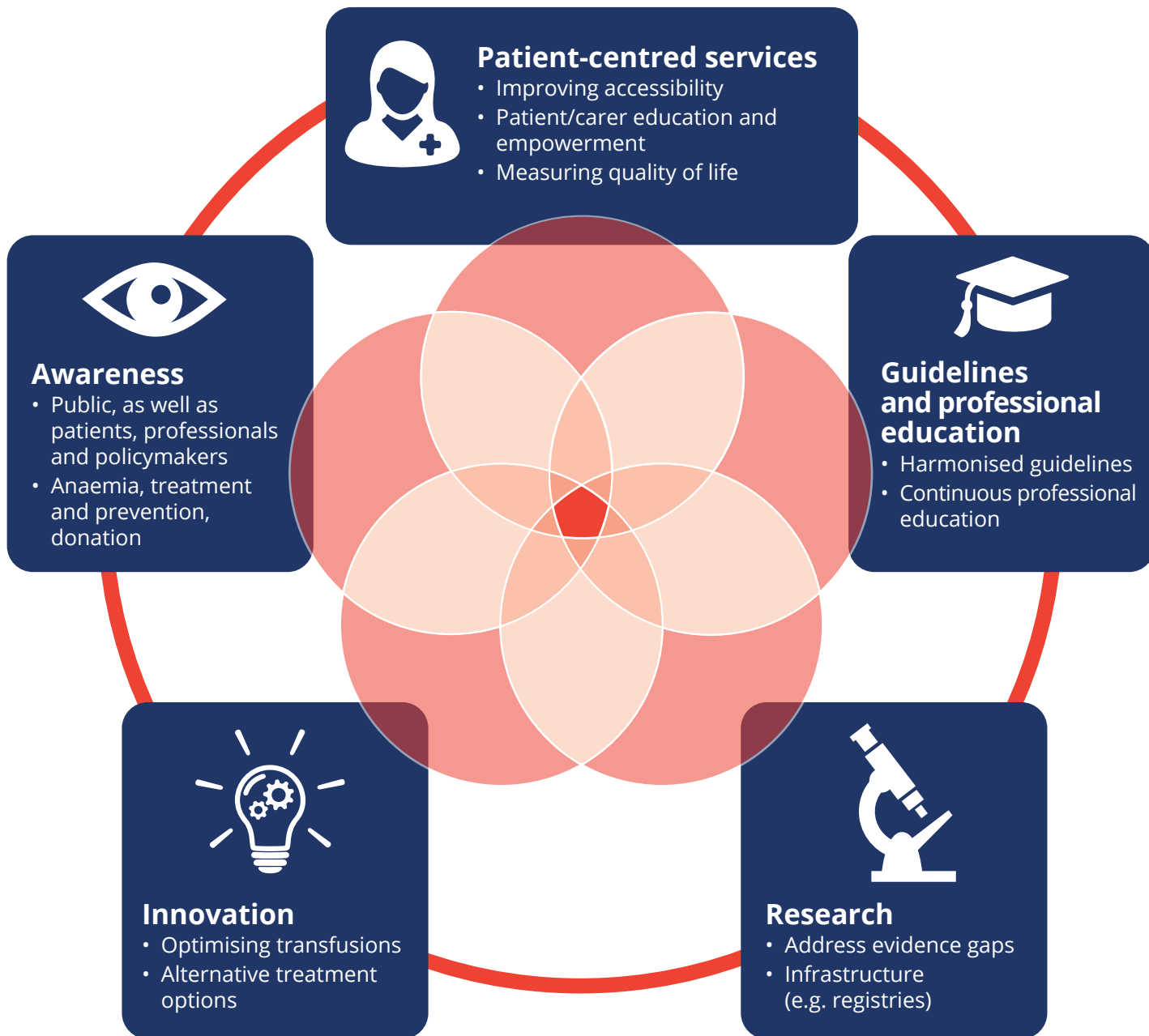
Once patients need transfusions there are few alternative treatment options

Policy actions

Recommendations to improve patient outcomes, reduce the potential risks of transfusions, and avoid blood wastage to help safeguard supplies and reduce the costs of transfusions:

Potential EU mechanisms for action:

- An EU Action Plan on blood
- EU Joint Action or EU-funded projects
- EU health research funding



The EU evaluation of the Blood, Tissues and Cells Directives should prompt revision of legislation to reflect new realities, address gaps and divergencies between countries – to support a sustainable blood supply and facilitate the uptake of innovation.

Blood and Beyond is a multi-stakeholder initiative developed and funded by Celgene, now part of Bristol Myers Squibb, involving experts from the fields of haematology and blood management, nursing, patient advocacy, health economics and hospital management. The aim of the initiative is to raise awareness of the impact of blood transfusion on patients, support networks, healthcare systems and society at large; with the overarching goal to help advance policies and practices that improve patient outcomes by optimising blood management and supporting innovation across Europe.